

# OPUS 2

## INTERNATIONAL

Alan Bates & Others v Post Office Limited

Day 16

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Opus 2 International - Official Court Reporters

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(10.30 am)

MR JASON PETER COYNE (continued)

Cross-examination by MR DE GARR ROBINSON (continued)

MR DE GARR ROBINSON: My Lord, good morning.

MR JUSTICE FRASER: Good morning.

MR DE GARR ROBINSON: Mr Coyne, good morning again.

A. Good morning.

Q. I'm going to talk about remote access today and for that purpose I would just like to spend a few minutes looking at the issues relating to remote access. Can I ask you to go to bundle {C1/1/1}, please. If we go to page {C1/1/3}, I will pick it up at Issue 10 under the heading "Access to and/or Editing of Transactions and Branch Accounts", and we will see the issue there:

"Whether the defendant and/or Fujitsu have had the ability / facility to: (i) insert, inject, edit or delete transaction data or data in branch accounts; (ii) implement fixes in Horizon that had the potential to affect transaction data or data in branch accounts; or (iii) rebuild branch transaction data."

And then is it at all; is it without the knowledge of the SPM; and without the consent of the SPM?

A. Yes.

Q. So this is really a theoretical question. It is what

1

could in theory be done based on the system configuration, yes?

A. Yes, but there are practical examples that will help answer those.

Q. I'm going to come to that. And transaction data or data in branch accounts. Let's get some terms clear. When I talk about transaction data I'm talking about records of transactions: price, date, quantity, money paid, that kind of thing. Do you understand?

A. Yes.

Q. That would be a practical and useful definition for that kind of term?

A. Yes.

Q. So shall we agree that that's what transaction data means for the purposes of our conversation today?

A. Yes. There's also session data, and within session data is often contained transactional data.

Q. Then data in branch accounts. A branch account, it is true, isn't it, is an aggregation of transactions from a given starting point, correct?

A. Yes.

Q. So your starting point is your opening position?

A. Yes.

Q. Which is itself an aggregation of prior transactions, yes?

2

A. Historical, yes.

Q. So when you start from time T0, the beginning of the branch, you will have a series of transactions, there will be a calculation at an accounting date, then you will have a closing balance which is your opening balance for the next period?

A. Yes.

Q. And on you go. And on each occasion what the system does is it does an aggregation, a calculation, based upon the transactions that have happened since the previous opening position, yes?

A. Yes.

Q. So if the opening position is a genuine aggregation of all the transactions that went before then the branch accounts will be right at that starting point, correct?

A. They should be, yes.

Q. You can change your accounting date or period. For example, you could have an accounting date that starts at 1 June and finishes at 20 June, and then you can change your mind and decide to finish the accounting period on 30 June.

A. I understand you can, yes.

Q. But that won't create a shortfall in your accounts, will it? It just means you have a different accounting period.

3

A. It shouldn't do, no.

Q. Thank you. When we talk about accounting data, for the reasons that we have discussed really it is the transaction data that would concern the account holder most of all, wouldn't it?

A. Yes.

Q. Any change to the transaction data is something that the user would want to know about because it might affect his balance at the next accounting date, yes?

A. Yes.

Q. Whether it is in his favour or against him?

A. Indeed.

Q. The user is much less likely to be concerned about changes to operational data that don't affect the aggregation of transactions that build up and aggregate into his balance, yes?

A. If it has little or no impact on his balance then, yes, that is right.

Q. The same goes for Post Office, doesn't it? It will be concerned about the accuracy of the branch accounts which of course are then transmitted and become part of its own accounts?

A. Mm.

Q. It will be much less concerned about adjustments, for example, to opening dates or matters of that sort, yes?

4

1 A. It is possible that it might have more impact on the  
 2 Post Office if dates are changed. I'm not sure of the  
 3 entire process and the back end of --  
 4 Q. That's fair. But in relation to postmasters, they will  
 5 be concerned about the transactions being right, but  
 6 form the aggregation resulting in whatever the balance  
 7 is at the relevant balance date?  
 8 A. Yes.  
 9 Q. Let's agree some more nomenclature. When I talk about  
 10 remote access today I'm going to be talking about  
 11 injecting, editing or deleting accounting data in branch  
 12 accounts, okay?  
 13 A. Yes.  
 14 Q. Maintained either in Legacy Horizon in messagestores or  
 15 in Horizon Online in the BRDB? Do you understand?  
 16 A. Yes, I do.  
 17 Q. I won't be talking about access to other systems which  
 18 may contain similar information, do you understand?  
 19 A. I do, yes.  
 20 Q. Thank you.  
 21 Let's move on to Issue 11. Issue 11 is if the  
 22 defendant or Fujitsu had these abilities:  
 23 "... did the Horizon system have any permission  
 24 controls upon the use of the above facility, and did the  
 25 system maintain a log of such actions and such

5

1 permission controls?"  
 2 Permission controls, they are a protection against  
 3 error or abuse, aren't they?  
 4 A. Yes.  
 5 Q. The types of controls that one has, a permission that  
 6 anyone at Fujitsu -- because we are essentially talking  
 7 about Fujitsu here, aren't we?  
 8 A. I believe so. I don't believe anyone else at  
 9 Post Office had access to --  
 10 Q. So permission from your superiors at Fujitsu and  
 11 permission from Post Office, yes?  
 12 A. Yes. The permissions on a technical level are more  
 13 about settings within the system that allowed certain  
 14 users or user groups in or out. I'm not sure whether  
 15 you are referring to sort of an oral permission.  
 16 Q. Yes, I'm referring to the business systems within which  
 17 Horizon was operated, and I think you would accept,  
 18 wouldn't you, that Post Office consent was always  
 19 required for any remote access data changes of the sort  
 20 that we have been talking about, yes?  
 21 A. No, I'm not sure that was the case. There is a number  
 22 of examples where there was a blanket or an annual  
 23 permission that was given for critical access that was  
 24 required by Fujitsu. So they didn't need to ask for it  
 25 each and every time.

6

1 Q. That surprises me, Mr Coyne. It may be my fault. Are  
 2 you suggesting there was an annual blanket consent given  
 3 by Post Office for the making of changes to accounting  
 4 data in branches by way of remote access?  
 5 A. There were certainly blanket authorisations given for  
 6 a number of tasks, I would have to go back and have  
 7 a look at what specific tasks they were, but I'm  
 8 reasonably sure that that included quite a widely worded  
 9 one that allowed Fujitsu to undertake any -- I think it  
 10 either said emergency or critical actions that were  
 11 required.  
 12 Q. I see. And are you aware of any occasion when that  
 13 authorisation was exercised so as to make a change to  
 14 branch accounting data of the sort we discussed?  
 15 A. Yes, I think that's likely. Because what typically  
 16 happens, or certainly there's evidence of it happening,  
 17 is that there will then be a retrospective document  
 18 that's created.  
 19 Q. I see. So what you are saying then is there were -- in  
 20 critical cases there were occasions when changes were  
 21 made and consent, as it were, was recorded  
 22 retrospectively. Is that what you are talking about?  
 23 A. What I'm saying is there was a blanket consent for  
 24 whenever Fujitsu decides that an element is critical,  
 25 that they need to deal with it, so they didn't have to

7

1 request permission. And I have also seen evidence that  
 2 after certain tasks have been undertaken, that  
 3 a retrospective document has been created. Whether  
 4 there is a retrospective document for every incident,  
 5 there is really no way of knowing.  
 6 Q. And how many of these retrospective documents have you  
 7 found in your researches?  
 8 A. Hundreds.  
 9 Q. Hundreds?  
 10 A. Hundreds, yes.  
 11 Q. Well, that takes me somewhat by surprise. Is this dealt  
 12 with in one of your reports, Mr Coyne?  
 13 A. No, I think this is typically seen from the OCRs or the  
 14 OCPs, so that's after the report was completed.  
 15 Q. Well, I'm not in a position to ask you any questions  
 16 about that because it comes as news to me. Is there any  
 17 reason why that hasn't been revealed to the defendant  
 18 beforehand?  
 19 A. I would have thought the defendant would have already  
 20 known, would they not?  
 21 Q. So what you are saying is this isn't something that was  
 22 mentioned in your first report, yes?  
 23 A. Yes.  
 24 Q. And it wasn't mentioned in your second report?  
 25 A. Yes.

8

1 Q. You have become aware of it since then?  
 2 A. Yes.  
 3 Q. But you have taken no step to inform the defendant that  
 4 you are aware of it and that it might form part of your  
 5 evidence today?  
 6 A. It is a question that was put to me that I'm answering.  
 7 I presumed that the defendant would be aware that  
 8 Fujitsu operated like that and created retrospective  
 9 documents.  
 10 Q. And have you discussed it with Dr Worden, Mr Coyne?  
 11 A. No.  
 12 Q. Well, do you agree with me that given that it may be  
 13 relevant to the issues that we are canvassing today,  
 14 given that it may be relevant to the issues arising in  
 15 this trial, do you agree with me that as an expert it  
 16 would have been helpful if you had broached it with  
 17 Dr Worden so that an agreed position -- so that the  
 18 relevant documents, which you haven't identified, could  
 19 be reviewed and an agreed position could be arrived at?  
 20 A. It didn't appear -- they were late documents -- sorry,  
 21 they were documents that were disclosed after I had  
 22 finalised my report, and it didn't appear to be any  
 23 particular issue. You asked me the question then and  
 24 I answered it. I didn't believe it would be  
 25 a revelation to anyone within Post Office that --

9

1 Q. Mr Coyne, you do understand how litigation works? You  
 2 are an experienced expert witness, yes?  
 3 A. Yes.  
 4 Q. And you know when counsel is cross-examining you,  
 5 counsel doesn't have the familiarity which all the other  
 6 individuals in the case do. What counsel does is  
 7 counsel looks at the material which he is facing and  
 8 decides upon questions that he is going to ask in  
 9 relation to that material.  
 10 A. Yes.  
 11 Q. Now, what you have just said comes as a complete  
 12 revelation to me and there's no way in the world I'm  
 13 going to be able to ask you any questions about it and,  
 14 if I may say so, I suggest to you that it is obvious to  
 15 you that that would be the position. Did you not  
 16 appreciate that that would be the position?  
 17 A. No, because it would be my perception that that would  
 18 already be known. It is only on the documents that have  
 19 been disclosed to me. The documents say that they are  
 20 created retrospectively.  
 21 Q. Well, Mr Coyne, I'm not going to ask you any questions  
 22 about that because none of this material has been put  
 23 forward or explained or identified and I'm not in  
 24 a position therefore to seek to test it, so I'm going to  
 25 lay that question aside and I'm going to continue with

10

1 the rest of my cross-examination, okay?  
 2 MR JUSTICE FRASER: Just before you do, can you just  
 3 describe to me the title of the documents you have just  
 4 explained?  
 5 A. Yes, there's a couple of documents that go together,  
 6 OCRs and OCPs, and they are requests for a change to  
 7 data and then the permission being granted.  
 8 MR JUSTICE FRASER: But those are the documents you are  
 9 referring to, are they?  
 10 A. Yes, my Lord, and --  
 11 MR JUSTICE FRASER: Hold on. And when do you say you got  
 12 them?  
 13 A. I believe that there was a request --  
 14 MR JUSTICE FRASER: No, no. When do you say, when are you  
 15 telling me, you got them?  
 16 A. Without looking at my records, my Lord, I'm not sure,  
 17 but --  
 18 MR JUSTICE FRASER: Ballpark.  
 19 A. Either when my report had been completed or just before.  
 20 The report was 1st February, so it was in or around that  
 21 period.  
 22 MR JUSTICE FRASER: All right.  
 23 Back to you, Mr de Garr Robinson.  
 24 MR DE GARR ROBINSON: Mr Coyne, there are two categories of  
 25 documents, aren't there, that relate to the process by

11

1 which consent is obtained or recorded in relation to  
 2 remote access. There are MSCs, aren't there?  
 3 A. Yes.  
 4 Q. And there are OCPs and also OCRs for less important  
 5 changes, yes?  
 6 A. Mm.  
 7 Q. And the MSCs were disclosed to you on 21 December,  
 8 weren't they?  
 9 A. Yes.  
 10 Q. And the OCPs and OCRs were disclosed to you on  
 11 24th January, weren't they?  
 12 A. That could well be the time I'm referring to. The  
 13 report was 1st February.  
 14 Q. And your report was served on 1st February, wasn't it?  
 15 A. Yes, so a week after the documents were disclosed.  
 16 Q. So in terms of the Fujitsu process for making changes,  
 17 the permission controls applied within Fujitsu, do you  
 18 accept that the sort of changes we are talking about,  
 19 remote insertions, edits or deletions of accounting data  
 20 held in branch accounts in the BRDB or the messagestore,  
 21 do you accept that Fujitsu applied a rule that changes  
 22 of that sort could only be made with another colleague  
 23 reviewing and approving the change that was going to be  
 24 made, yes?  
 25 A. Yes. There is often a record that you will see that

12

1 will say authorised by somebody and witnessed by  
 2 somebody.  
 3 Q. And there are in the trial bundles a consistent series  
 4 of documents which were produced and updated by Fujitsu  
 5 imposing this four eyes requirement for any change, yes?  
 6 A. Yes.  
 7 Q. Were you in court when Mr Roll confirmed in  
 8 cross-examination that the four eyes approach was  
 9 applied quite strictly?  
 10 A. Yes, it was, although I have noted documents that appear  
 11 to have the same name in the box of authorisation and  
 12 witness, I don't really know how that could occur, but  
 13 I do accept --  
 14 Q. Well, Mr Coyne, again that's something which you haven't  
 15 said in any of your reports, isn't it?  
 16 A. No, I don't believe I have.  
 17 Q. Do you not think it would have been helpful to have  
 18 revealed these points before your cross-examination  
 19 started so that the matter could be considered and  
 20 addressed?  
 21 A. I mean, to be fair, there might be other things that  
 22 arise that we could say the very same thing about.  
 23 There has to be a cut-off point by which time the report  
 24 gets sent.  
 25 Q. So you don't agree it would have been helpful to

13

1 reveal -- bearing in mind that permission controls are  
 2 specifically referred to in the Horizon Issues, you  
 3 don't believe it would have been helpful even to discuss  
 4 with Dr Worden what you had found in the documents?  
 5 A. As I said before, I agree that you have asked me the  
 6 question now and I have told you something and I can see  
 7 how that would be helpful to include within the report,  
 8 but there has to be a cut-off time when the report gets  
 9 sent or you could literally spend days and days and days  
 10 adding things to the report.  
 11 Q. But Mr Coyne, your fourth joint statement was made on  
 12 4th March, wasn't it, over a month after your second  
 13 report?  
 14 A. Yes.  
 15 Q. And that fourth statement contains a number of  
 16 references to OCPs and OCRs, doesn't it?  
 17 A. Mm.  
 18 Q. And yet nowhere -- and it also contains a number of  
 19 assertions of your own view. It is not as if it is  
 20 simply a statement of matters are agreed, actually there  
 21 are a considerable number of things that you assert  
 22 unilaterally?  
 23 A. Yes.  
 24 Q. But nowhere is there any hint of the two revelations  
 25 that you have just produced in court today. Is there

14

1 a reason for that?  
 2 A. Well, I don't believe they are revelations, I'm just  
 3 simply answering the questions that you are putting to  
 4 me.  
 5 Q. Perhaps I could suggest this: you take the view that it  
 6 is not relevant to any of the Horizon Issues that arise  
 7 for determination in this trial, is that your view?  
 8 A. No, no, it may well be relevant.  
 9 Q. Let me move on.  
 10 It is important to distinguish, isn't it, between  
 11 two questions in relation to permission controls. The  
 12 first one is whether controls could sensibly be tighter,  
 13 and the second is whether any weakness in the controls  
 14 has created adverse effects because, for example,  
 15 something was done wrongly or done too often?  
 16 A. Yes.  
 17 Q. So imagine, for example, some very lax controls around  
 18 the use of a tool that was never in fact used. That  
 19 would be regrettable but it wouldn't actually have  
 20 a practical impact in a case of this sort, would it?  
 21 A. If there were lax controls but there were no actions  
 22 that were used to exploit that lax control, then yes,  
 23 I agree.  
 24 Q. The same goes if the tool is used, but it is fair to see  
 25 from the evidence that the tool was used rarely and it

15

1 was used in a careful way. Again, the fact that  
 2 permission controls weren't as strict as perhaps some  
 3 people might think, that wouldn't adversely affect the  
 4 net outcome, the practical impact of the existence and  
 5 use of the tool, would it?  
 6 A. I think the problem with permission controls is that it  
 7 allows somebody into a system and on that system there  
 8 could be a number of different tools, so they may not  
 9 have used the prescribed tool but they're then into the  
 10 system so they could use other tools. That is the  
 11 danger with --  
 12 Q. Mr Coyne, I would ask you -- I have limited time and  
 13 your reports are really huge and contain a vast number  
 14 of claims which I can't possibly deal with in the time  
 15 that I already have available. I would ask you, please,  
 16 to focus on my question and answer my question rather  
 17 than to go off, turn left, and give me an answer which  
 18 you conceive may assist some other aspect of your  
 19 analysis.  
 20 My question was: in circumstances where the tool is  
 21 used, but it is used rarely and it is used carefully,  
 22 that won't have a practical impact, for example, on the  
 23 reliability of the overall system and the reliability of  
 24 the accounting data contained in the branch accounts,  
 25 would it?

16

1 A. No.  
 2 Q. Thank you. If we move on to Issue 12 which is on page  
 3 {C1/1/3}, the next issue is how often was any facility  
 4 used, if at all? That is a practical question -- the  
 5 previous one we looked at is a theoretical question --  
 6 it is a practical question of scale. Now, you have seen  
 7 over 220,000 PEAKs, haven't you?  
 8 A. Yes.  
 9 Q. And we know from the answers you have previously given  
 10 you have also seen many tens of thousands of OCPs, OCRs  
 11 and MSCs, haven't you?  
 12 A. Yes.  
 13 Q. And they are a rich source of material to interrogate to  
 14 ascertaining the answer as to whether and how frequently  
 15 facilities were used to remotely access branch accounts  
 16 and change the accounting data in those branch accounts,  
 17 yes?  
 18 A. They are a good source of information that would  
 19 indicate what steps were taken. They very, very rarely  
 20 outline what was done within the branch accounts.  
 21 Q. Well, is that right? Let's take it in stages. PEAKs --  
 22 if there is some remote access by Fujitsu, it will be  
 23 mentioned in a PEAK, won't it?  
 24 A. Yes, if there is a need to conduct some remote access  
 25 then, yes, that's often --

1 Q. And the PEAK, as well as identifying the fact of some  
 2 remote access, will give a fair indication of the sort  
 3 of remote access that's being exercised, yes?  
 4 A. Often, yes.  
 5 Q. It won't -- it may not give you the SQL lines that have  
 6 actually been written if that is the form of remote  
 7 access being used, but it will give you a fair  
 8 assessment of the nature of the change that's being done  
 9 and the effect of that change, yes?  
 10 A. From reading it you can often see what is going to be  
 11 done but you can't often see the effect. That's the  
 12 issue that I have.  
 13 Q. Could I suggest to you, Mr Coyne, that you can usually  
 14 see the nature of the change that's being affected?  
 15 A. The nature of it but not necessarily the number of it.  
 16 If it is a value, you don't often see the value --  
 17 Q. So you are suggesting that you can see a change is being  
 18 made to a particular kind of value but it may not tell  
 19 you what the numerical number of the change is, is that  
 20 what you are saying?  
 21 A. Yes.  
 22 Q. And as well as PEAKs, you have the ability to search  
 23 OCPs and OCRs and MSCs as well?  
 24 A. Yes.  
 25 Q. And they give you further information relating to the

1 question whether any remote access has been exercised so  
 2 as to affect branch accounting data, correct?  
 3 A. Yes.  
 4 Q. So between the PEAKs on the one hand and the OCPs, OCRs  
 5 and MSCs on the other, you do have a rich resource, if  
 6 you choose, to go through them and form an assessment of  
 7 the scale of the exercises of remote access that have  
 8 happened in the last 15 or 16 years, yes?  
 9 A. You get an indication of what was occurring, yes.  
 10 Q. As we have already discussed, you are capable of using  
 11 search functions to look for cases where that form of  
 12 remote access has been exercised, where there has been  
 13 remote access affecting branch data. You are well  
 14 capable of -- by looking for FAD codes or the word "FAD"  
 15 and by looking for other technical terms that often go  
 16 hand in hand with the exercise of remote access, you are  
 17 well capable of finding -- doing intelligent searches  
 18 with a view to finding documents indicating the overall  
 19 scale of the remote access that has been exercised,  
 20 would you agree with that?  
 21 A. No, that's not a very easy task, to identify remote  
 22 access and how it took place. You can't very easily  
 23 search for things like SQL statements, you can't  
 24 actually search really for FAD code because FAD is a box  
 25 at the top of most of the PEAKs, it is just often not

1 filled in, so that isn't a very good thing to search  
 2 for. We recently found out that there was -- I think  
 3 the word Riposte import or something was an indication  
 4 of -- so that helped us with our searching.  
 5 So it is true that we have identified things that  
 6 would indicate remote access but I don't believe we are  
 7 advanced in that.  
 8 Q. What I would suggest to you, Mr Coyne, is that where  
 9 there is an exercise of remote access in relation to  
 10 a branch's account, the PEAK will identify the branch by  
 11 its FAD code, yes?  
 12 A. There are certainly occurrences of that, yes.  
 13 Q. Mr Coyne, you are understating the position, aren't you?  
 14 It will invariably be the position that where there is  
 15 a problem at a branch which requires some form of remote  
 16 access to be exercised, the PEAK will identify the  
 17 branch that is concerned. That's just how the system  
 18 works, isn't it?  
 19 A. It will sometimes say a correction or an adjustment  
 20 needs to be made at the branch and that might be the  
 21 terminology. There will sometimes be a FAD code, there  
 22 will sometimes be the name, so Dalmellington for  
 23 example, but it is not always consistent.  
 24 Q. And in the same way, the OCPs and MSCs, you will have  
 25 corresponding OCPs and MSCs relating to the exercises of

1 remote access, they will identify the branches. Where  
 2 there is a form of remote access dealing with branch  
 3 data --  
 4 A. They certainly should do, yes.  
 5 Q. -- they will identify the branches. So with intelligent  
 6 search functions it is possible to form a view, isn't  
 7 it, of the nature of the branch -- the scale of the  
 8 exercise of remote access to affect branch accounts?  
 9 A. I mean that is a hugely complex task to start from the  
 10 large number of PEAKs, attempt to determine which within  
 11 those PEAKs suggest remote access, and then go from the  
 12 PEAKs into the OCRs and OCPs. Yes, you could do it for  
 13 one or two examples, but you couldn't do that for all,  
 14 that would be --  
 15 Q. You could do it for a sample, couldn't you? You could  
 16 choose a sample of particular branches with particular  
 17 names and FAD codes and you could use your search  
 18 function to see how often those branches have been the  
 19 subject of exercises of remote access, couldn't you?  
 20 A. Yes, you could do that. Yes.  
 21 Q. And that would be a very easy way of forming  
 22 an assessment of scale, the scale or the extent to which  
 23 remote access has been exercised, wouldn't it?  
 24 A. If you were confident that you had all of the search  
 25 terms that would confirm remote access has taken place

21

1 then you would use those search terms.  
 2 Q. You could just choose a group of FAD codes and a group  
 3 of branch names that correspond with those FAD codes.  
 4 You would identify a series of PEAKs and a series of  
 5 OCPs, OCRs or MSCs with those FAD codes in them and you  
 6 would be able to go through them and form an assessment  
 7 of how often that happened?  
 8 A. From the starting point of a particular number of FAD  
 9 codes?  
 10 Q. Yes.  
 11 A. Yes, that would be possible to do.  
 12 Q. And it would have been a suitable and helpful thing to  
 13 have done that, wouldn't it?  
 14 A. Yes, I think it would be. If we could identify  
 15 particular FAD codes and try and analyse the entire  
 16 movements of what has gone on with that particular FAD  
 17 code, that might be an exercise to do.  
 18 Q. And both you and Dr Worden are aware of the FAD codes  
 19 that relate to a very helpful sample in the context of  
 20 this case, aren't you, which is the FAD codes of the  
 21 claimants in these proceedings, yes?  
 22 A. Yes. In one of my early requests for information the  
 23 response that I was given is that I shouldn't be  
 24 requesting any information that makes any attempt to  
 25 identify particular claimant characteristics.

22

1 Q. Mr Coyne, I really don't think you should be suggesting  
 2 that Post Office were telling you not to look at that  
 3 group as a group. We could have a discussion about it  
 4 if you want, but could I caution you against making that  
 5 claim because that wouldn't be an entirely accurate way  
 6 of characterising what happened, would it?  
 7 A. Can we go to the RFI and have a look at that?  
 8 Q. Let's do it after a break, shall we?  
 9 MR GREEN: My Lord, I'm concerned about fairness about what  
 10 was said and things being put to a witness which are  
 11 just not right, but then it is a matter for my learned  
 12 friend.  
 13 MR DE GARR ROBINSON: Let me discuss it with my learned  
 14 friend because if I have gone wrong, I will be the first  
 15 to apologise.  
 16 MR JUSTICE FRASER: Do you mean about the existence of the  
 17 RFI?  
 18 MR GREEN: No, my Lord, the fact that at an early stage  
 19 attempts to look at aspects of claimants were met with  
 20 a rebuff that it was not about these claimants  
 21 specifically.  
 22 MR JUSTICE FRASER: All right.  
 23 MR DE GARR ROBINSON: See, that's exactly --  
 24 MR JUSTICE FRASER: All right. I'm not going to have a spat  
 25 during a cross-examination. Mr de Garr Robinson says he

23

1 is going to perhaps return to it after the break and you  
 2 have got your re-examination.  
 3 MR DE GARR ROBINSON: So I have suggested to you, Mr Coyne,  
 4 that it would be possible. I mean, you have been aware  
 5 of the FAD codes of the claimant branches for a very  
 6 considerable time, haven't you?  
 7 A. No, I haven't.  
 8 Q. The FAD codes I'm informed were included in Dr Worden's  
 9 first report. Do you recall that?  
 10 A. The FAD codes are certainly included in one of  
 11 Dr Worden's reports, I'm not sure whether it was his  
 12 first one or not.  
 13 Q. So it isn't the position that the FAD codes for the  
 14 claimant branches are things you have only just become  
 15 aware of recently, it wouldn't be right to say that,  
 16 would it?  
 17 A. I haven't concerned myself with claimant branches  
 18 because it was made quite clear to me that there was no  
 19 interest in this matter about particular claimants.  
 20 MR JUSTICE FRASER: Did you have the FAD codes before  
 21 Dr Worden's report?  
 22 A. No.  
 23 MR JUSTICE FRASER: All right.  
 24 MR DE GARR ROBINSON: It needn't be the claimant FAD codes,  
 25 one could just take a sample, a random sample of

24

1 branches, and perform an analysis which would give you  
 2 an indication of the sort of scale of remote access  
 3 that's happened over the past 15 or so years, yes?  
 4 A. If you were aware of the things that you should be  
 5 searching for then, yes, that would be possible.  
 6 Q. Well, if you were aware of the FAD codes of your sample  
 7 group, Mr Coyne, yes?  
 8 A. Yes, and then look at the whole history of support  
 9 across the FAD codes, yes.  
 10 Q. Moving on. Two elements to the extent, the potential to  
 11 affect liability in issue -- well, let's move on to  
 12 issue 13:  
 13 "To what extent did the use of any such facility  
 14 have the potential to affect the reliability of  
 15 branches' accounting positions?"  
 16 That involves two distinct questions, doesn't it?  
 17 It involves how often it happened in the first place,  
 18 which is raised in Issue 12, yes?  
 19 A. Yes.  
 20 Q. And it also involves a question as to how carefully any  
 21 remote access was done, whether there are reasons for  
 22 thinking it was done casually and without proper regard  
 23 to the accuracy of any changes made, or whether it was  
 24 done extremely carefully in accordance with procedures  
 25 that we have already discussed, yes?

25

1 A. Yes.  
 2 Q. So if one were to get to a position where one is aware  
 3 that remote access has happened on some occasions but  
 4 doesn't happen thousands and thousands of times  
 5 a year -- I mean, you have no evidence to think, do you,  
 6 that remote access has happened thousands of times  
 7 a year?  
 8 A. No.  
 9 Q. Do you have a sense, bearing in mind the documents you  
 10 have seen, as to the likely scale of annual remote  
 11 access?  
 12 A. No. It would appear that the access in Legacy Horizon  
 13 was higher than it would be in Horizon Online but  
 14 I don't really get an indication of scale.  
 15 Q. You have not found hundreds of PEAKs or hundreds of OCPs  
 16 or MSCs showing that remote access affecting branch  
 17 accounts has happened in this case, have you?  
 18 A. No, there won't be hundreds that refer to adding  
 19 messages or things like that.  
 20 Q. I have read your reports -- I have tried to read your  
 21 reports quite carefully, it is always a dangerous thing  
 22 to make a claim of that sort, but my apprehension from  
 23 the reports I have read, particularly your second  
 24 report, is you had found relatively few occasions when  
 25 remote access had been used to affect branch accounts,

26

1 would that be fair?  
 2 A. There's often talk about the need to make a correction  
 3 or to address a discrepancy and there's often a couple  
 4 of ways of doing that. Sometimes you will see in the  
 5 PEAK that the question will be asked -- sorry, the  
 6 statement will be made: this can either be corrected by  
 7 inserting a message or do Post Office want to issue  
 8 a transaction correction to make the adjustment? So you  
 9 often see that. So you don't know what the outcome of  
 10 that was.  
 11 Q. Mr Coyne, you have referred to some of those PEAKs and,  
 12 so far as I can tell from having read them myself, where  
 13 there has been an exercise of remote access that's  
 14 recorded in the PEAK. The PEAK doesn't go quiet once  
 15 the possibility is mooted, it only goes quiet when  
 16 remote access hasn't been exercised because it has been  
 17 dealt with by different means. Surely you would agree  
 18 that?  
 19 A. When it goes quiet and you don't know what it is, the  
 20 two options are given in there. So it is either that  
 21 Post Office has been asked to correct it or remote  
 22 access has taken place, there's no evidence either way.  
 23 Q. Mr Coyne, I think we agreed yesterday that Fujitsu in  
 24 the production of PEAKs are quite process driven, yes?  
 25 A. Yes.

27

1 Q. When they do something, when they do a piece of work in  
 2 relation to a particular PEAK they will write down, they  
 3 will indicate in the PEAK what work they have done?  
 4 A. Yes, that's fair.  
 5 Q. And what I would like to suggest to you is that it is  
 6 clear that in circumstances where you have a PEAK and  
 7 someone at the SSC is wondering whether a change or  
 8 a remedy should be applied either by Post Office issuing  
 9 a transaction correction or perhaps by doing some form  
 10 of remote access, in circumstances where the transaction  
 11 correction or other manual approach is adopted, there  
 12 will be no suggestion of any remote access being adopted  
 13 later on in the PEAK, yes?  
 14 A. Yes.  
 15 Q. But where some remote access is done, where a decision  
 16 is made that the person at the SSC is actually going to  
 17 make a change, that will always be documented in a PEAK,  
 18 will it not? That's how Fujitsu work?  
 19 A. Yes, I would agree that that would appear to be their  
 20 typical process.  
 21 Q. Thank you. Bearing in mind that you have now agreed  
 22 I think on two occasions that where there has been some  
 23 remote access there will be a PEAK indicating that it  
 24 has happened, if I could go back to my earlier question:  
 25 I would be right in thinking, wouldn't I, that of the

28

1 PEAKs you have seen you found relatively few examples of  
 2 remote access having been exercised? Would the answer  
 3 to my question be right?  
 4 A. I don't know exactly what the number will be, but it is  
 5 tens, twenties --  
 6 Q. Looking at your report it would be low tens, wouldn't  
 7 it? You haven't found hundreds?  
 8 A. No, I haven't found evidence of hundreds, no.  
 9 Q. So you have found, as I say, a relatively small number;  
 10 relative to the fact that we are talking about 3 million  
 11 branch accounts over the last 20 years, all you have  
 12 actually found is a very small number which is less than  
 13 20 or 30, let's call it less than 30, would you agree  
 14 with that?  
 15 A. Yes.  
 16 Q. Thank you. Just to finish off on Issue 13, if the  
 17 evidence indicates that remote access is really  
 18 relatively rare and over a period of, say, 15 years it  
 19 has only happened on perhaps 100 or so occasions, and if  
 20 the evidence shows, that's so far available, that when  
 21 remote access is exercised, it is exercised very  
 22 carefully and people check the change being made and so  
 23 on, would you accept that the chances of remote access  
 24 being affected in a way which adversely affects branch  
 25 accounts, in other words which creates false shortfalls,

29

1 is vanishingly small compared with the 3 million branch  
 2 accounts that we know have been produced during the life  
 3 of Horizon?  
 4 A. It would be fair to say that it would be reasonably  
 5 small. I don't know about saying it was vanishingly  
 6 small.  
 7 Q. It would be what Dr Worden calls in his report a second  
 8 order issue, yes?  
 9 A. I mean there is evidence of mistakes being made in  
 10 remote access --  
 11 Q. Really? Is there evidence -- have you seen a single  
 12 document indicating the form of remote access we are  
 13 talking about, namely remote access, affecting branch  
 14 accounts, as opposed to remote access affecting, say,  
 15 the TPS system or something? Are you aware of a single  
 16 instance where that form of remote access has ended up  
 17 in creating a false figure in a branch's accounts?  
 18 A. Yes, we saw one, one was put on a witness in the early  
 19 stages with the £1,000 that was left.  
 20 Q. Is that the only example that you have seen?  
 21 A. Well, I have seen that example. Again that's something  
 22 that's incredibly difficult to search for or audit  
 23 because you don't have the values into the PEAKs, so  
 24 if --  
 25 Q. But I --

30

1 A. Sorry, let me finish. So if remote access is recorded  
 2 the outcome isn't often recorded.  
 3 Q. But going back to my question, I think you have answered  
 4 a different question. You have indicated that errors  
 5 might sometimes happen?  
 6 A. Yes.  
 7 Q. And I'm not seeking to suggest that perfection can ever  
 8 be achieved, so I'm not seeking to dispute the  
 9 possibility of errors happening. What I am seeking to  
 10 suggest to you is that all the evidence you have seen  
 11 indicates that when Fujitsu did remote access they did  
 12 it carefully, yes?  
 13 A. Yes.  
 14 Q. And that it is fair to infer that when that careful  
 15 remote access was done, the chances of a false figure  
 16 being introduced into a postmaster's account was very  
 17 small?  
 18 A. It was small.  
 19 Q. It would be less than 1%? Certainly less than 5%, yes?  
 20 A. I would be uncomfortable trying to put a percentage on  
 21 it. I'm happy to say it would be small.  
 22 Q. So in circumstances where you are aware of a relatively  
 23 small number of cases where remote access has actually  
 24 happened, and where you accept that the chances of  
 25 remote access being done incorrectly so as to produce

31

1 false figures is quite small, then the overall chance of  
 2 an account -- any particular branch account being  
 3 adversely affected by remote access is absolutely tiny,  
 4 isn't it, because it is a small chance multiplied by  
 5 a small chance, correct?  
 6 A. By this particular form of remote access then I do agree  
 7 it is small.  
 8 Q. That's what Dr Worden calls a second order issue, and  
 9 would you therefore agree with me that that  
 10 characterisation is correct? In the scheme of this  
 11 case, where the overall decision to be made by the court  
 12 is how robust Horizon was in the 3 million-odd or so  
 13 accounts that it produced over its 20-year life, this  
 14 particular issue is not of great practical significance  
 15 because it is a second order issue, yes?  
 16 A. I mean, what we have talked about here is the insertion  
 17 of messages and editing in BRDB. We have excluded  
 18 certain elements of remote control there, we haven't  
 19 talked about rebuilding or anything like that. Are we  
 20 going to come onto those later?  
 21 Q. Yes, we are. You are talking about rebuilding. Are we  
 22 going to talk about the process by which message stores  
 23 in Legacy Horizon will be trashed and then replicated  
 24 from back up copies on the mirror server --  
 25 A. Yes, because they actually have an impact on messages at

32

1 the branch which do have an impact on --  
 2 Q. We are going to come to that. But just taking that very  
 3 briefly, the process we have just discussed, that form  
 4 of rebuilding where a counter for some reason has  
 5 a problem and its messagestore is deleted, what that  
 6 does is it triggers an automatic system in Riposte, yes?  
 7 A. Right.  
 8 Q. Which causes the mirror server, which contains all the  
 9 data, to be replicated to the particular machine whose  
 10 messagestore has been deleted, yes?  
 11 A. That is the process, how it should work, but there is  
 12 evidence of that failing and messages having to be  
 13 extracted from hard drives of failed counters, the  
 14 actual messages being taken out there and then rebuilt  
 15 on another counter. So I agree that what you have  
 16 outlined there is the position that should happen.  
 17 Q. We will come to those examples, I will ask you about  
 18 those if I have got time. But they are relatively few,  
 19 yes? We are talking about a very small number of  
 20 examples that you are aware of, is that right?  
 21 A. There is quite a few where that --  
 22 Q. When you say quite a few, how many are you aware of?  
 23 A. I have certainly found ten or so.  
 24 Q. Okay. So ten occasions over the ten-year period up to  
 25 Horizon Online. But laying those aside, the standard

33

1 form of messagestore deletion with automatic  
 2 replication, that is a form of a back up. That's  
 3 actually a form of robustness, isn't it, because what  
 4 happens is when that system is invoked, it is invoked  
 5 automatically, the system is designed --  
 6 A. It is designed to do that, yes.  
 7 Q. -- to operate in that way. And what then happens is you  
 8 have a machine which actually has the right data on it  
 9 after all?  
 10 A. That's absolutely the way that it should happen, yes.  
 11 Q. So let's now look at the forms of remote access you have  
 12 addressed in your report. Can we go to the fourth joint  
 13 statement, please, that's at {D1/5/4}. If I could pick  
 14 it up at page 4, paragraph 10.2. This is addressing the  
 15 ability / facility to insert, inject, edit or delete  
 16 transaction data or data in branch accounts, so this is  
 17 what I call proper remote access, yes?  
 18 A. Yes.  
 19 Q. What you have done there is you have set out the forms  
 20 of remote access of which you are aware, is that right?  
 21 A. Yes.  
 22 Q. Are there any other forms of remote access of which you  
 23 are aware that are not set out in the this joint  
 24 statement?  
 25 A. No.

34

1 Q. Thank you. So what I need to do today is cross-examine  
 2 you on the forms of remote access that I will find in  
 3 this joint statement, correct?  
 4 A. Yes. You started this session by reducing what remote  
 5 access meant.  
 6 Q. I started this session by defining what remote access  
 7 was, Mr Coyne, which was what's referred to in Horizon  
 8 Issue 10 --  
 9 A. Yes, and you said this excluded --  
 10 Q. -- which is inserting, injecting, editing or deleting  
 11 transaction data or data in branch accounts.  
 12 A. Yes.  
 13 Q. What I'm doing, I'm not seeking to pull a fast one, I'm  
 14 simply seeking to ensure that that's what we are talking  
 15 about in the course of today, because if we talk about  
 16 too many other things we will never finish. Okay?  
 17 A. Okay.  
 18 Q. Thank you. Laying aside whether the forms of remote  
 19 access you describe here do account as forms of remote  
 20 access, would you agree that the forms you have  
 21 identified in the joint statement are consistent with  
 22 the basic forms discussed in Mr Godeseth's and  
 23 Mr Parker's witness statements?  
 24 A. Yes.  
 25 Q. You have not discovered any forms of remote access that

35

1 they haven't discussed, have you?  
 2 A. No. There is modification to back end systems.  
 3 Q. Yes.  
 4 A. And it is often blurred whether people describe that as  
 5 being remote access or not.  
 6 Q. Yes. But on the basis of the definition I very  
 7 carefully and at somewhat boring length tried to  
 8 establish with you over the past hour, then that doesn't  
 9 count as remote access within the meaning of Horizon  
 10 Issue 10, does it?  
 11 A. Yes, okay.  
 12 Q. Thank you. Let's try and establish some other important  
 13 distinctions about data that may be contained in  
 14 accounts but isn't accounting data. Could you tell me  
 15 what recovery flags are?  
 16 A. Yes, it is what we talked about yesterday when we talked  
 17 about flagging the ground whenever a recoverable  
 18 transaction starts, and then at the end of it, if that  
 19 transaction is completed, the flag will then be removed.  
 20 But if a counter reboots and attempts to restart it  
 21 looks to see whether there is a recovery flag there, and  
 22 if there is a recovery flag there then rather than just  
 23 allow the subpostmaster to serve the next customer it  
 24 attempts to deal with that recoverable situation.  
 25 Q. So a recovery flag is not of itself a branch accounting

36

1 data? It is not transaction data and it is not a branch  
 2 accounting data, is it?  
 3 A. It is not, but it indicates that there is a situation  
 4 that has occurred, that a transaction might be part  
 5 complete. So it is an indication that something needs  
 6 to be looked at very carefully to see if there is  
 7 something that's out of balance.  
 8 Q. But it is not the data that's referred to in Horizon  
 9 Issue 10, is it?  
 10 A. No. It has an impact on the data that is Horizon  
 11 Issue 10 but it isn't in itself transaction data.  
 12 Q. And it is not recorded in the tables that constitute  
 13 a branch's accounts in the messagestore or the BRDB, is  
 14 it?  
 15 A. I think it is in the BRDB.  
 16 Q. It is in -- I was quite careful in my question. Let's  
 17 just talk about the BRDB which is Horizon Online. The  
 18 tables that the recovery flag are contained in are not  
 19 tables which contain transaction data within the meaning  
 20 of Horizon Issue 10, are they? They are not data that's  
 21 in the branch's accounts. It is a different -- there  
 22 are hundreds of tables in the BRDB, yes?  
 23 A. Yes.  
 24 Q. And the recovery flags, and there will be other tables  
 25 containing the data relating to the transaction to which

37

1 the recovery flag relates, yes?  
 2 A. Yes.  
 3 Q. Both the tables containing the recovery flags and the  
 4 tables containing the data relating to recoverable  
 5 transactions, those tables do not form a part of  
 6 a branch's accounts, do they?  
 7 A. Yes, that is right. There is a danger, I think we are  
 8 probably splitting hairs, but there's a difference  
 9 between tables and fields within a table. But taking  
 10 your point at face value, yes, it is in a slightly  
 11 different place.  
 12 Q. Absolutely. The recovery flag is a field actually.  
 13 I do accept there is this concept of fields. But it  
 14 doesn't affect the answer to my questions, does it?  
 15 A. That is right.  
 16 Q. The tables we are talking about and the various fields  
 17 in those tables do not form part either of transaction  
 18 data in branch accounts or of other accounting data in  
 19 branch accounts, do they?  
 20 A. No. They are an indicator that something needs to be  
 21 checked in the branch accounts.  
 22 Q. And there is other data also, which I think is often  
 23 called configuration data, which are in other tables as  
 24 well which could be of great use to Post Office in its  
 25 accounting systems, or can be of great use in relation

38

1 to defensive programming or redundant storage of data  
 2 and comparison of copies of the same data in the system.  
 3 Things like time stamps where the system records all  
 4 sorts of time stamps, there can be hundreds of them for  
 5 one transaction recording the particular moment in time  
 6 at which the information relating to a transaction moved  
 7 from one table to the other or something was done with  
 8 it, yes?  
 9 A. I'm sorry, you have conflated so many different issues  
 10 there I'm not with you, sorry. I'm really not with you.  
 11 Q. It would take too long, let me move on.  
 12 When we talk about inserting or injecting data,  
 13 again can we agree that what we are talking about is  
 14 manually creating and inserting either accounting data  
 15 or transaction data, yes?  
 16 A. Yes.  
 17 Q. So a human being exercising some discretion and judgment  
 18 to produce some transaction data, for example, and then  
 19 inserting that transaction into a branch's accounts,  
 20 yes?  
 21 A. Yes, the process will be assembling all the characters  
 22 that are required for that transaction and then pushing  
 23 it into the database.  
 24 Q. An example of that happening would be what Mr Godeseth  
 25 calls balancing transactions, yes?

39

1 A. Yes.  
 2 Q. You are aware that Mr Godeseth restricts the definition  
 3 of balancing transactions to a form of transaction  
 4 insertion by using the transaction correction tool, yes?  
 5 A. Yes, there was a tool that was created for  
 6 Horizon Online for that purpose.  
 7 Q. Just to be clear, I'm going to follow the same practice.  
 8 So when I talk about balancing transactions, I'm going  
 9 to be talking about transactions that are a result of  
 10 the exercise of the transaction correction tool in  
 11 Horizon Online, okay?  
 12 A. And not any transactions that are outside of that --  
 13 Q. Yes. It is important to make that clear because in your  
 14 reports you often use the term "balancing transactions"  
 15 to refer to other forms of insertion, don't you?  
 16 A. But they are balancing transactions.  
 17 Q. I appreciate that that's how you think of them, but the  
 18 term "balancing transaction", the technical meaning of  
 19 the term "balancing transaction", is a transaction that  
 20 is inserted as a result of the exercise or the use of  
 21 the transaction correction tool. And there are other  
 22 forms of injection or insertion. For example, there  
 23 were transaction insertions that could be made in  
 24 Legacy Horizon, and Mr Godeseth is quite clear in his  
 25 witness statement, isn't he, that those aren't properly

40

1 to be regarded as balancing transactions , yes?  
 2 A. I accept that's the term that has been accepted by  
 3 Mr Godeseth, but in general accounting terms "balancing  
 4 transaction" is not just within Horizon, it is in  
 5 general accounting. It is a transaction that is  
 6 inserted to make something balance.  
 7 Q. Okay. For the purposes of this discussion let's adopt  
 8 IT terminology, let's not adopt what you regard as  
 9 ordinary accounting terminology. So just to be clear,  
 10 shall we first of all agree that when we talk about  
 11 balancing transactions we are talking about the  
 12 transaction correction tool, could we do that?  
 13 A. I can accept that.  
 14 Q. Can we also agree that there are a large number of  
 15 references in your report to balancing transactions that  
 16 have nothing to do with the transaction correction tool,  
 17 yes?  
 18 A. They are balancing transactions but outside of the  
 19 balancing transaction tool.  
 20 Q. Mr Coyne, I'm not seeking to criticise you, I'm just  
 21 seeking to get you to agree that in your report, when  
 22 you refer to balancing transactions, the judge shouldn't  
 23 think that you are talking about exercises of the  
 24 transaction correction tool?  
 25 A. Yes.

41

1 Q. My understanding is that you agree with that?  
 2 A. Yes, I do.  
 3 Q. Editing now. Editing again is manually manipulating  
 4 data that's already in the branch accounts, yes?  
 5 A. Yes.  
 6 Q. And deleting. With deleting there is an important  
 7 practical distinction to be drawn, isn't there, between  
 8 deleting a whole set of messages to allow -- the whole  
 9 messagestore to allow automatic replication to take  
 10 place, yes?  
 11 A. Mm.  
 12 Q. And manually deleting lines of transaction data, yes?  
 13 A. Yes.  
 14 Q. And those two are very different things?  
 15 A. Yes.  
 16 Q. Both involve deletion but they have different  
 17 implications. The first is an automatic process which  
 18 actually enhances robustness, it doesn't detract from  
 19 it. Would you agree?  
 20 A. Could you put that first one to me again, please.  
 21 Q. The process by which machines which have problems in  
 22 their messagestores, have their messagestores deleted so  
 23 that there is an automatic Riposte-generated process by  
 24 which a copy of the messages that have been created are  
 25 replicated back to that machine --

42

1 A. Yes.  
 2 Q. That enhances robustness, it doesn't detract from it?  
 3 A. That is right, yes.  
 4 Q. Thank you.  
 5 Now let's get some issues out of the way. First of  
 6 all, transaction corrections and transaction  
 7 acknowledgements. In your reports you treat transaction  
 8 corrections and transaction acknowledgements as remote  
 9 access facilities, don't you?  
 10 A. That was because there was a witness statement, perhaps  
 11 it was Mr Godeseth, where he outlined the ways that  
 12 branch accounts could be affected, and transaction  
 13 acknowledgements and transaction corrections were in  
 14 that list.  
 15 Q. But that approach leads to a very curious result,  
 16 doesn't it, Mr Coyne? It means that when Post Office  
 17 used to send error notices up to 2005, your view is that  
 18 that's not a form of remote access, yes?  
 19 A. Not for the purposes of the remote access that you  
 20 described before, no.  
 21 Q. But when the system was changed to transaction  
 22 corrections in 2005, you take the view that that is  
 23 a form of remote access?  
 24 A. Well, it is somebody remote from the branch having  
 25 an impact on branch accounts.

43

1 Q. I could go to the pleadings but I'm not sure I have ...  
 2 I could go to the pleadings, but if I simply suggest to  
 3 you -- would you recognise that the forms of remote  
 4 access that the Horizon Issues are getting at aren't  
 5 concerned with transaction corrections and transaction  
 6 acknowledgements, and indeed that the Horizon Issues  
 7 were drafted with a view to excluding the process by way  
 8 transaction corrections and transaction acknowledgements  
 9 were arrived at --  
 10 A. All right, okay.  
 11 Q. Can we agree that for the purposes of this debate it  
 12 really doesn't assist matters to include transaction  
 13 corrections and transaction acknowledgements, yes?  
 14 A. Okay.  
 15 Q. Would you give me a moment?  
 16 I'm sorry, I think I may have misheard you. I'm  
 17 told that in answer to my question you indicated that  
 18 error notices itself, in your view, would constitute  
 19 a form of remote access. Is that true?  
 20 A. No -- well, an error notice has been issued by  
 21 Post Office to make a change to branch accounts. So  
 22 depending on what definition we are using at the moment,  
 23 then it is somebody remote from the branch making  
 24 a change.  
 25 Q. My understanding of your report, Mr Coyne, was that you

44

1 were indicating that error notices didn't constitute  
 2 remote access but TCs did, because TCs were transmitted  
 3 electronically whereas error notices were transmitted by  
 4 post. Is that not your evidence? Have I misunderstood?  
 5 A. Could you take me to that paragraph --  
 6 Q. I'm not sure I can but it might be at paragraph 5.421 in  
 7 your second statement. I'm sorry to take time up with  
 8 this. It might be at bundle {D2/4.1/242}.  
 9 Yes, here we go, page 242 on the trial bundle copy,  
 10 and it is paragraph 5.422.  
 11 Here you:  
 12 " ... disagree with Dr Worden that TCs are not  
 13 inserted transactions ..."  
 14 You pick up at paragraph (b), you say:  
 15 "TCs - whilst these are visibly acknowledged and  
 16 accepted by the Subpostmaster ..."  
 17 And by the way, Mr Coyne, what we say in this case  
 18 is that remote access is all about transactions -- data  
 19 that is directly inserted into branch accounts without  
 20 the SPM having the ability to stop it?  
 21 A. Right.  
 22 Q. That's what the Horizon Issues, I will be submitting to  
 23 the court in due course, that's what the remote access  
 24 Horizon Issues were designed to address.  
 25 A. Yes.

45

1 Q. But be that as it may, you say whilst they have to be  
 2 accepted they are still inserted.  
 3 Then over the page {D2/4.1/243}, at paragraph (c)  
 4 you say:  
 5 "Prior to TCs, I do not consider manual entry of  
 6 error notice amounts to be inserted transactions, as the  
 7 Subpostmaster is responsible for entering them on their  
 8 system, which differs from TCs as they are resident  
 9 within the accounts electronically."  
 10 Do you see that?  
 11 A. Yes.  
 12 Q. So your view then was error notices weren't but TCs  
 13 were?  
 14 A. Yes, because one is created remotely and one is the  
 15 transaction is actually created at the branch.  
 16 Q. But your view now is that both error notices and TCs,  
 17 they also form a part of remote access, do they?  
 18 A. Well, the remote access that we just agreed to talk  
 19 about here excluded those and just talked about the  
 20 insertion of messages.  
 21 MR JUSTICE FRASER: Mr de Garr Robinson, I think someone,  
 22 maybe one of your juniors, might have set a hare  
 23 running. But looking at the -- is this question  
 24 an interpretation of the answer at {Day16/43:21}?  
 25 MR DE GARR ROBINSON: Thank you, my Lord.

46

1 MR JUSTICE FRASER: Is that the point you are pursuing? You  
 2 put a question at line 17, which was then answered:  
 3 "Not for the purposes of the remote access that you  
 4 described before ..."  
 5 Is that the point you are pursuing?  
 6 MR DE GARR ROBINSON: I was pursuing a suggestion that in  
 7 Mr Coyne's view --  
 8 MR JUSTICE FRASER: Based on that answer, though, I mean?  
 9 MR DE GARR ROBINSON: Yes. Is that right? Yes.  
 10 MR JUSTICE FRASER: The easiest way might be to deal with it  
 11 like this: do you treat error notices either in your  
 12 report or today as constituting remote access?  
 13 A. No.  
 14 MR JUSTICE FRASER: Right.  
 15 MR DE GARR ROBINSON: Very good.  
 16 MR JUSTICE FRASER: Back to you, Mr de Garr Robinson.  
 17 MR DE GARR ROBINSON: Again in terms of -- well, you accept  
 18 it would be reasonable and sensible, bearing in mind the  
 19 nature of the Horizon Issues, just to lay TCs and TAs to  
 20 one side?  
 21 A. Yes.  
 22 Q. Because at least the SPM is aware of them and has to  
 23 press a button to allow them into his branch accounts?  
 24 A. Yes.  
 25 Q. Now let's talk about Post Office back office systems.

47

1 We have discussed several times already how Horizon --  
 2 for example, in Horizon Online it would be the BRDB --  
 3 feeds data to various parties including Post Office, so  
 4 Post Office systems like POLFS, POLSAP and Credence and  
 5 so on, but also to other systems.  
 6 A. Yes.  
 7 Q. And that's via what's known as the transaction  
 8 processing system, yes?  
 9 A. Yes.  
 10 Q. Often known as TPS.  
 11 A. Yes.  
 12 Q. And an aspect of the transaction processing system is  
 13 what's called TIP, yes?  
 14 A. Yes.  
 15 Q. Do you remember what that acronym stands for? A  
 16 slightly unfair question.  
 17 A. No. It will be ...  
 18 Q. Transaction information --  
 19 A. Processing, yes.  
 20 Q. And the TIP system is an interface, isn't it, with the  
 21 TPS system, so it allows files to be accessed and  
 22 perhaps -- I'm looking around to make sure I'm saying  
 23 the right thing -- so it is fair to say that TIP and TPS  
 24 are aspects of each other?  
 25 A. Yes.

48

1 Q. Or they are so closely related we can treat them --  
 2 A. They have an interconnection, yes.  
 3 Q. And both of them are not part of the BRDB, are they?  
 4 A. No, they take inputs from data which has been in the  
 5 BRDB and extract it and decide what to do with it.  
 6 Q. And branch accounting data is the data which is held in  
 7 the relevant tables within the BRDB?  
 8 A. Yes.  
 9 Q. What happens is copies are taken from those tables?  
 10 A. Yes.  
 11 Q. And they are transmitted into the TPS?  
 12 A. Yes.  
 13 Q. Once they are in the TPS they are held, reconciliations  
 14 are done, all sorts of things, they are looked at by all  
 15 sorts of people for all sorts of purposes, and also they  
 16 are propagated to various Post Office management  
 17 information systems and elsewhere?  
 18 A. And the clients and things like that.  
 19 Q. Yes. So it follows, doesn't it, that any change made to  
 20 any data in the TPS system or in the TIP aspect of the  
 21 TPS system, that is not a change to data held in branch  
 22 accounts in Horizon, yes?  
 23 A. It is not, but any changes made in there can have the  
 24 impact on branch accounts.  
 25 Q. And what you are suggesting there is a mechanism by

49

1 which a change is made to some data that's held in TPS?  
 2 A. Yes.  
 3 Q. That data is then transmitted to Post Office?  
 4 A. Mm.  
 5 Q. Post Office looks at it and thinks that must be correct,  
 6 looks at the data that's in branch accounts and sees  
 7 that the data is different?  
 8 A. Yes.  
 9 Q. And then decides to issue a transaction correction?  
 10 A. Yes.  
 11 Q. So what we are talking about is a situation where  
 12 a change has been made to the TPS, data in the TPS?  
 13 A. Yes.  
 14 Q. And has been made wrongly?  
 15 A. Yes.  
 16 Q. And that error has then caused Post Office itself to  
 17 make an error?  
 18 A. Yes.  
 19 Q. Which results in a transaction correction decision being  
 20 made, yes?  
 21 A. Yes.  
 22 Q. Would you agree with me, Mr Coyne, that that also is  
 23 a second order issue of the sort that we discussed  
 24 earlier?  
 25 A. Could I please have a definition of that second order

50

1 issue?  
 2 Q. Let me just take it in stages. One of the main purposes  
 3 of the TPS system or one of the main aspects of the TPS  
 4 system is the harvesting and reconciliation processes  
 5 that are operated within it?  
 6 A. Yes.  
 7 Q. And the purposes of those operations is to ensure that  
 8 the data in the TPS system -- TPS stands for, I'm saying  
 9 "system" twice but you will forgive me if I make that  
 10 mistake. That data is then compared with other  
 11 available forms of data with a view to checking to see  
 12 whether it is correct or not?  
 13 A. Yes.  
 14 Q. And in circumstances where the data in the TPS system is  
 15 wrong because it has been changed, it will create  
 16 a discrepancy, won't it?  
 17 A. It will, yes.  
 18 Q. Between the data that's in TPS and the client data that  
 19 it is being compared with?  
 20 A. Yes.  
 21 Q. So for the scenario that you are suggesting, what would  
 22 have to happen is some human being would have to make  
 23 a deliberate change to the information in the TPS --  
 24 A. Using the TIP correction tool.  
 25 Q. And it would throw up a reconciliation error exception,

51

1 wouldn't it?  
 2 A. To Post Office, yes.  
 3 Q. What you are suggesting then is Post Office would see  
 4 a discrepancy but prefer the TPS version of truth  
 5 compared to the client data version of truth, yes?  
 6 A. Yes.  
 7 Q. Secondly, that would be a necessary condition before  
 8 there's any possibility of Post Office issuing  
 9 a transaction correction, yes?  
 10 A. Yes. So it is either a correction that's been made with  
 11 the TIP correction tool, which is the tool -- I think we  
 12 saw a screen shot of it earlier on within the trial,  
 13 where a copy of the data is brought up and then the user  
 14 can make modifications to that data, either the value or  
 15 where it is destined for, so the change is made. You  
 16 can either do it on one transaction or it can be done on  
 17 many transactions if the same fault occurs with all  
 18 transactions. You can fix lots at once and the tool  
 19 then sends the data on its way.  
 20 Q. Are you approaching an answer to the question I actually  
 21 asked you, though, which is: the chances of a change to  
 22 the TPS data, it would be picked up as a reconciliation  
 23 exception, wouldn't it?  
 24 A. Yes.  
 25 Q. And what would be necessary is for Post Office to decide

52

1 that the TPS erroneous data was right as compared with  
 2 the client data that's direct from the branch --  
 3 A. Yes, the Post Office would have to make a decision on  
 4 that.  
 5 Q. And that is quite an unlikely eventuality, isn't it?  
 6 A. I don't understand why you would ask that. The  
 7 Post Office would need to make a decision on which set  
 8 of data is correct.  
 9 Q. Let's take it in stages. You would accept, I am sure,  
 10 that when changes are made by human beings to the TPS it  
 11 is to correct problems that have become apparent in the  
 12 TPS, yes?  
 13 A. Yes.  
 14 Q. No one would make a change in the TPS in order to  
 15 introduce an incorrect figure?  
 16 A. I agree.  
 17 Q. So the purpose of any change that's made using the TIP  
 18 repair tool, that's what we are talking about, and I am  
 19 sure your Lordship is familiar with that tool, the  
 20 purpose of the TIP repair tool is actually to ensure  
 21 that there is coherence in the data in the TPS system as  
 22 compared with the data in the branch accounts and the  
 23 data held by clients. That's the general purpose of  
 24 making changes?  
 25 A. Yes.

53

1 Q. You would only use the TIP repair tool where you thought  
 2 there was a problem in the TPS because it is not  
 3 consistent either with branch accounts or with client  
 4 data, yes?  
 5 A. Yes.  
 6 Q. So we are talking about a scenario where a change is  
 7 made for the purpose of ensuring that data is consistent  
 8 with branch accounts but being done erroneously so that  
 9 it becomes inconsistent with branch accounts?  
 10 A. Yes.  
 11 Q. Would you accept that that's quite an unlikely  
 12 eventuality, in practice?  
 13 A. It certainly shouldn't occur that people make mistakes  
 14 with the tool but it is possible that it can occur.  
 15 Q. Mr Coyne, you do seem to be struggling to accept  
 16 something which in my respectful suggestion is  
 17 blindingly obvious, which is that in the vast majority  
 18 of cases, given the purpose with which the TIP repair  
 19 tool is always used, the chances of the TIP repair tool  
 20 being used in a way which introduces an error -- which  
 21 actually introduces an inconsistency with branch  
 22 accounts when the whole purpose of the tool is to ensure  
 23 that doesn't happen, usually it is to ensure coherence  
 24 between the accounts and the TPS system -- the chances  
 25 in the real world of the use of a TIP repair tool which

54

1 introduces a discrepancy is very small?  
 2 A. All that can be fairly said about that is that it would  
 3 require human error.  
 4 Q. That's all you are willing to say about it. But could  
 5 I suggest that someone applying commonsense to the  
 6 situation would readily say, yes, the chances are very  
 7 small?  
 8 A. It's whatever the chances are of a human making an error  
 9 with that.  
 10 Q. You really don't want to talk about extent, do you,  
 11 Mr Coyne?  
 12 And where that kind of error happens, the chances of  
 13 that error then not being picked up when Post Office  
 14 looks at the client account and looks at the client  
 15 data, the chances of Post Office favouring the erroneous  
 16 TPS data over the alternative sources of data that are  
 17 available, would you accept the chances of that  
 18 happening are very low?  
 19 A. No, I don't accept that.  
 20 Q. Why don't you accept that? Isn't it commonsense again?  
 21 A. It's not, because when you see suggested adjustments  
 22 coming in from the third parties, and one of the  
 23 examples was the Santander corrections that arrived from  
 24 the client, many of those it was said got sent on to the  
 25 postmasters as TCs and they had to dispute those TCs.

55

1 Q. Mr Coyne, are you referring to the evidence that was  
 2 given in Mr Smith's first witness statement about  
 3 Santander transaction corrections and the disputes in  
 4 relation to that?  
 5 A. Yes, quite possibly.  
 6 Q. And have you forgotten the evidence that's given in  
 7 Mr Smith's second witness statement explaining that  
 8 those figures don't actually represent what, entirely  
 9 fairly, you understood them to represent in his first  
 10 witness statement?  
 11 A. Yes, I think what he changed it to was that they were  
 12 mistakes made by Santander that the Post Office  
 13 disputed. Is that the correction that he made?  
 14 Q. Santander were operating a system, as I recall, in which  
 15 paper had to be sent from the branch to Santander and  
 16 Santander often wouldn't get the paper, so it would take  
 17 the view that a transaction either had or hadn't  
 18 happened in a particular way. What would then happen,  
 19 it would send its figures through, there would be  
 20 a discrepancy between its figures and Post Office's  
 21 figures, and Post Office would then go to the branch and  
 22 say "Have you sent the paperwork?" And quite often the  
 23 branch would then provide the paperwork which  
 24 Post Office could show to Santander in order to  
 25 demonstrate what the true position was. Does that ring

56

1 a bell?  
 2 A. It does ring a bell, yes.  
 3 Q. Right. That has nothing to do with changes made by use  
 4 of the TIP repair tool to the TPS system, does it?  
 5 A. No, I think that's probably right. But what my  
 6 illustration was, you asked the question whether it is  
 7 more likely that Post Office would accept the  
 8 postmaster's position rather than another set of data,  
 9 and I said that I don't believe it is unlikely because  
 10 there is evidence that Post Office have taken the other  
 11 party's position as to what the data should appear as  
 12 rather than the postmaster and --  
 13 Q. Okay.  
 14 A. Sorry let me finish, please. And that's what's led to  
 15 some of the TCs being disputed by the subpostmasters and  
 16 that that dispute has been accepted by the Post Office.  
 17 Q. Let me get this straight then. We have a scenario where  
 18 data that is correct in the BRDB goes into the TPS and  
 19 Fujitsu decides to change it. Yes?  
 20 A. Yes, Fujitsu intervened on that data and made some  
 21 correction.  
 22 Q. And I think you have accepted already that when Fujitsu,  
 23 using the TIP repair tool, decides to change some data  
 24 it will be for the purpose of ensuring coherence between  
 25 the BRDB and the information that is in the TPS system?

57

1 A. I would have thought that was the way --  
 2 Q. Yes. So what you are suggesting is a situation where  
 3 the intention of Fujitsu is to ensure that the figures  
 4 are the same, but something goes wrong such that a false  
 5 figure is injected into the TPS system?  
 6 A. Yes.  
 7 Q. So we have the correct figures in the branch accounts?  
 8 A. Mm.  
 9 Q. We have an incorrect figure in the TPS system, which  
 10 then goes -- which is then harvested and, as part of the  
 11 process, is compared with lots of other forms of data  
 12 including client data?  
 13 A. Mm.  
 14 Q. And what you are suggesting is -- let's say the Fujitsu  
 15 person who made the change wrote down £10 instead of  
 16 £100. What you are suggesting is because client  
 17 reconciliation data can be erroneous too, there's  
 18 a chance that the client will itself have written down  
 19 £10 instead of £100 and in those circumstances  
 20 Post Office will accept both sets of figures. That is  
 21 the scenario you appear to be suggesting, yes?  
 22 A. No, not that two people will have the erroneous sets of  
 23 figures. That there will be an error introduced using  
 24 the TIP repair tool by Fujitsu but that the external  
 25 client has a different view of that data.

58

1 Q. What I was seeking to ascertain from you, Mr Coyne, is  
 2 whether you are willing to accept that in the real world  
 3 the chances of Fujitsu making a mistake so as to create  
 4 a discrepancy rather than to create one or affirm one by  
 5 its use of the TIP repair tool, which is its intention,  
 6 and the chances of when that happens of Post Office  
 7 looking at that error and looking at the client data and  
 8 deciding to accept the erroneous figure rather than the  
 9 client data and what's already in the Horizon branch  
 10 accounts, what I'm suggesting to you is that that  
 11 scenario is obviously a very unlikely one. I'm not  
 12 saying it is impossible, but in the real world the  
 13 chances of those different kinds of errors all combining  
 14 together to result in a false transaction correction is  
 15 very low?  
 16 A. I do accept that it is low but it isn't that many errors  
 17 that's required. It is only really required that  
 18 an error is made by Fujitsu either on the value or  
 19 potentially the transaction type, because if the  
 20 transaction type is altered the transaction could go  
 21 somewhere differently or be dealt with differently. And  
 22 then the only other decision that needs to be taken is  
 23 that Post Office accept that data rather than the  
 24 branch's version of the data.  
 25 Q. And you are suggesting that in circumstances where the

59

1 transaction is properly undertaken in the branch and  
 2 an error is introduced, and you accept it is going to  
 3 happen only in a small minority of cases, an error is  
 4 introduced, don't you accept that the circumstances in  
 5 which Post Office is likely to prefer that erroneous  
 6 figure than the figure that is correctly held in branch  
 7 accounts and correctly held by the client, the chances  
 8 of that happening in practice are very small?  
 9 A. Yes.  
 10 Q. And then of course there is a further chance it has to  
 11 happen, there is a further box that needs to be ticked  
 12 in order for branch accounts to be affected, because  
 13 once of course the transaction correction goes through  
 14 it gets sent to the postmaster?  
 15 A. Yes.  
 16 Q. And the postmaster says, "Hang on a second, I didn't  
 17 receive £90,000, this isn't right", and phones up the  
 18 helpline because that's what you do when you don't agree  
 19 with the transaction correction?  
 20 A. Yes.  
 21 Q. So again there is a further protection, there is  
 22 a further filter that needs to be got through, namely  
 23 either the postmaster not objecting or the postmaster's  
 24 objections being overruled?  
 25 A. Yes.

60

1 Q. And do you not accept that in the real world, given the  
 2 scale of the changes -- well, what is the scale of  
 3 changes made to the TPS system by using the TIP repair  
 4 tool? It is relatively small, isn't it?  
 5 A. It is relatively small in comparison with the number of  
 6 transactions per day, but it is a high number of repairs  
 7 that are made each day.  
 8 Q. How many?  
 9 A. I don't know precisely but I think it has been  
 10 mentioned. It is in the thousands, I believe.  
 11 Q. Thousands a day?  
 12 A. Of TIP repairs, yes.  
 13 Q. Okay. That comes as a surprise to me. But you are  
 14 saying it is small relative to the number of  
 15 transactions that are actually passing through the  
 16 system in the day?  
 17 A. Yes, but it is still quite a big number that he has  
 18 done. I do believe it is in evidence somewhere.  
 19 Q. I will have to look at that.  
 20 My Lord, I see it is 11.50, and this isn't  
 21 a convenient moment but in fairness --  
 22 MR JUSTICE FRASER: All right. Would you like to pursue it  
 23 for a couple more minutes?  
 24 MR DE GARR ROBINSON: Yes, if that's agreeable.  
 25 MR JUSTICE FRASER: As long as it is only a couple of

1 minutes then that's fine, otherwise we can break now.  
 2 MR DE GARR ROBINSON: Last question before -- or last  
 3 series, couple of questions. Where the TIP repair tool  
 4 is exercised there will be a PEAK relating to its  
 5 exercise, yes?  
 6 A. There should be, yes.  
 7 Q. Are you suggesting that there are PEAKs numbering in the  
 8 thousands per day reflecting the exercise of the TIP  
 9 repair tool in the PEAKs that you have seen?  
 10 A. No, I don't believe there is one, there isn't one PEAK  
 11 per TIP repair that's undertaken. You don't have a one  
 12 to one relationship.  
 13 Q. Have you seen a significant number of PEAKs relating to  
 14 the exercise of the TIP repair tool?  
 15 A. I don't know what the number will be, but there are  
 16 PEAKs that talk about the TIP repair tool.  
 17 Q. Could you give me a sense of scale? Are you talking  
 18 about a dozen, are you talking about a thousand, are you  
 19 talking about a smaller number?  
 20 A. What I'd prefer to do, because I'm pretty sure the  
 21 number of tips that are done per day or per month is in  
 22 the evidence somewhere, I would prefer to find that and  
 23 give you the number.  
 24 MR DE GARR ROBINSON: Very good. My Lord, perhaps that  
 25 would be a convenient moment.

1 MR JUSTICE FRASER: All right. You might not be able to do  
 2 that in ten minutes, though, I imagine, Mr Coyne?  
 3 A. No, I wouldn't imagine so, my Lord.  
 4 MR JUSTICE FRASER: No. So just to be clear, he's not being  
 5 asked to do that now.  
 6 MR DE GARR ROBINSON: That's a shame.  
 7 MR JUSTICE FRASER: Well, he doesn't have the trial bundle  
 8 apart from anything else.  
 9 We will have a 10-minute break. We will re-visit  
 10 that question at 1 o'clock about whether the witness  
 11 statements should just be given to the witness in a hard  
 12 copy for him to flick through over lunchtime.  
 13 MR DE GARR ROBINSON: My Lord, I'm afraid I'm very  
 14 old-fashioned. I'm in favour of hard copy bundles.  
 15 MR JUSTICE FRASER: No, I just mean whether it is the sort  
 16 of exercise you want done for 2 o'clock or whether you  
 17 want done this evening. You have still got tomorrow.  
 18 MR DE GARR ROBINSON: What, referring the witness to  
 19 particular witness statements?  
 20 MR JUSTICE FRASER: No, not you referring him to anything.  
 21 Him looking for the number that he says is there which  
 22 he says he will give you. But we will just address it  
 23 briefly at 1 o'clock, whether you would like it done  
 24 this evening or at lunchtime.  
 25 10 minutes.

1 (11.55 am)  
 2 (A short break)  
 3 (12.05 pm)  
 4 MR DE GARR ROBINSON: So Mr Coyne, just to finish up with  
 5 the line of questions we were exploring before the  
 6 break.  
 7 First of all you referred to the fact that  
 8 sometimes, let me put it this way, bulk changes were  
 9 made by means of the TIP repair tool, yes?  
 10 A. Yes.  
 11 Q. So changes were made to more than one item of data?  
 12 A. Yes.  
 13 Q. Would you accept that inevitably those changes are not  
 14 going to be changes to transaction data because of  
 15 course each transaction has its own individual  
 16 characteristics. Those changes will be changes to  
 17 attributes, you know, adding missing fields or flags of  
 18 some sort. Those would be the kind of changes that  
 19 would be done in bulk, yes?  
 20 A. Yes.  
 21 Q. So when we are talking about erroneous transaction data  
 22 being created as a result of the TIP repair tool in the  
 23 TPS system, we are not really worried about, we don't  
 24 need to be concerned about, bulk changes of that sort  
 25 because the basic transaction details will not be

1 changed.  
 2 A. Unless there were bulk changes made to things like  
 3 the transaction type or something like that.  
 4 Q. Have you seen any changes of that sort being done?  
 5 A. No.  
 6 Q. I'm grateful. Then just to finish up, the kind of  
 7 scenario that you are suggesting would require, first of  
 8 all, Fujitsu to make a mistake in its use of the TIP  
 9 repair tool, effectively to do the opposite of what it  
 10 intended to do, yes?  
 11 A. Certainly to make a mistake, yes.  
 12 Q. And Post Office to make a mistake in its review of the  
 13 relevant data and its comparison of that data with other  
 14 independent data, yes?  
 15 A. Yes, but I'm not sure what data Post Office actually has  
 16 to be able to make that determination.  
 17 Q. But Post Office would have to make a --  
 18 A. They would have to make a determination based on  
 19 something, yes.  
 20 Q. Then the postmaster would have to make a mistake either  
 21 in not objecting or in not objecting enough to the TC  
 22 that he has been provided with, yes?  
 23 A. Yes.  
 24 Q. So would it be fair to say that the scenario you are  
 25 talking about, if the scenario we were talking about

65

1 before was a second order issue, this is a third order  
 2 issue, isn't it? It requires a series of unfortunate  
 3 events, all of which are not particularly likely to  
 4 combine together, yes?  
 5 A. Yes.  
 6 Q. So in the real world, the overall likelihood of those  
 7 three things all happening at the same time again is  
 8 extremely small, yes?  
 9 A. It would be a small percentage of the millions or  
 10 billions of transactions, yes.  
 11 Q. It would be a fraction of a percent, wouldn't it?  
 12 A. Yes.  
 13 Q. Okay, one final question in relation to the TIP repair  
 14 tool. Could we go to your second report {D2/4.1/72},  
 15 please. I would like to pick it up at page 72.  
 16 A. Is that 72 on the face of the document?  
 17 Q. It is the trial bundle reference. All I'm taking you to  
 18 is the heading, you see the heading above  
 19 paragraph 3.220, "Evidence of Insertions/Deletions  
 20 within Branch Accounts ..."  
 21 A. Yes.  
 22 Q. So what you are talking about in this section is changes  
 23 to data which is held within branch accounts?  
 24 A. Yes.  
 25 Q. So what you are signalling to the reader is that the

66

1 changes being discussed in this section are all changes  
 2 being made to data that is held in the BRDB that  
 3 constitutes the branch accounting data, yes?  
 4 A. Or that has an impact on branch accounts, yes.  
 5 Q. No. You say your "Evidence of Insertion/Deletions  
 6 within Branch Accounts ...". What you are talking about  
 7 is insertions and deletions made to accounting data held  
 8 in branch accounts.  
 9 A. Yes.  
 10 Q. Surely you accept that that's what that heading conveys?  
 11 A. Yes.  
 12 Q. If we can go forward to page {D2/4.1/78}, perhaps  
 13 I could ask you to read paragraphs 3.247 through to  
 14 paragraph 3.248. {D2/4.1/79}  
 15 No, I'm so sorry, 3.243 through to 3.248, please.  
 16 A. 3.243?  
 17 Q. Yes.  
 18 MR JUSTICE FRASER: On page 78.  
 19 (Pause)  
 20 A. Yes.  
 21 Q. I am sure you know where I'm going, Mr Coyne, but in  
 22 those paragraphs you are talking about changes made to  
 23 data in the TPS, aren't you?  
 24 A. Yes.  
 25 Q. And yet you finish up with 3.248 which says:

67

1 "The PEAK above therefore indicates that Fujitsu  
 2 support had the capabilities to manually rebuild data."  
 3 This is all under the heading I took you to before.  
 4 So by data, you meant data held in branch accounts.  
 5 Would you accept that your entire approach to the TPS  
 6 system as exemplified in these paragraphs is actually  
 7 rather misleading?  
 8 A. I think the heading is misleading because it is talking  
 9 about modifications that have an impact on branch  
 10 accounts.  
 11 Q. Well nowhere, Mr Coyne -- correct me if I'm wrong -- but  
 12 nowhere in the section from 3.220 all the way through to  
 13 3.248 do you discuss the third order issue of  
 14 Post Office making a mistake as a result of what's in  
 15 the TPS, that mistake somehow getting through the  
 16 reconciliation process, a TC being sent to a postmaster,  
 17 the postmaster accepting it or not being able to dispute  
 18 it. You don't discuss any of that in this section at  
 19 all. You present this entire section as if you are  
 20 talking about changes being made to data in branch  
 21 accounts, don't you?  
 22 A. Yes.  
 23 Q. Do you not think it would have been helpful and balanced  
 24 to have made clear the fundamental distinction to be  
 25 drawn between remote access of the sort that is actually

68

1 raised in the Horizon Issues, namely remote access to  
 2 data held in branch accounts in the BRDB, and this kind  
 3 of data activity which is in a completely -- well, not  
 4 completely, but in a different system from the system  
 5 which holds branch accounting data. Do you not think it  
 6 would have been helpful to have made that clear?  
 7 A. But this separation between what remote means is  
 8 something that you wanted set out for the purposes of  
 9 questioning.  
 10 Q. So would I be right in inferring from your answer that  
 11 you didn't want to make that distinction? You were  
 12 quite happy for the distinction between changes made to  
 13 data in branch accounts and changes made to data held  
 14 elsewhere, you weren't interested in that distinction,  
 15 you just wanted to talk about changes made to data, full  
 16 stop?  
 17 A. That were remote from the branch. That it isn't changes  
 18 to data that's been made at the branch counter.  
 19 Q. But Mr Coyne, the branch can't change data that's held  
 20 in the TPS. So the notion that changes to data being  
 21 made in the TPS is being made remotely from the branch  
 22 makes no conceivable sense, does it?  
 23 A. But I think it does when the question being asked here  
 24 is whether data that was being modified or created was  
 25 created at the branch or not at the branch.

69

1 Q. What I would like to suggest to you, Mr Coyne, is that  
 2 in large portions both of your first report and of your  
 3 second report you gloss over the distinction between  
 4 changing data that's actually in branch accounts and  
 5 changing data elsewhere that may have other  
 6 consequences, that may indirectly one day, possibly,  
 7 depending on certain contingencies, have an effect on  
 8 what the branch accounts ultimately say. And what I'm  
 9 suggesting to you is it would have been helpful for  
 10 an expert seeking to address the Horizon Issues to have  
 11 made that distinction very clear. Do you accept that?  
 12 A. I don't accept that, no.  
 13 Q. Right, let's move on to global branches. You deal with  
 14 that in sections 4 and 5 of your second report. And in  
 15 that report you maintained that remote access was  
 16 possible for people with global user permissions  
 17 operating out of global branches?  
 18 A. Mm.  
 19 Q. You will recall that Mr Godeseth responded to that  
 20 suggestion in his third witness statement and explained  
 21 that that isn't the case because global branches can't  
 22 be used for the conducting of business and, if they  
 23 could, the business that would be done would be recorded  
 24 against the branch, the FAD code of the global branch  
 25 out of which the business was being done. Do you

70

1 remember that?  
 2 A. I do.  
 3 Q. I wonder whether we could therefore save some time if  
 4 I simply ask you whether, in the light of what  
 5 Mr Godeseth has said, you now accept that global users  
 6 can't remotely access the branch accounts of individual  
 7 branches when sitting at the screen of a global branch?  
 8 A. Yes. The information that I got was from the manual,  
 9 and the manual does suggest that that would be possible,  
 10 but I accept from the evidence of Mr Godeseth that that  
 11 is unlikely to be the case.  
 12 Q. You accept that in fact the way the system is designed  
 13 is that no business at all can be done at a global  
 14 branch?  
 15 A. Yes, that makes complete sense.  
 16 Q. And that even if business could be done at a global  
 17 branch, because it is intrinsic to the way that Horizon  
 18 is designed, that business would belong to, it would be  
 19 recorded as business being done by, the global branch?  
 20 A. Yes.  
 21 Q. Thank you. That has saved a great deal of time. I'm  
 22 very grateful to you.  
 23 If we could go now to the joint fourth statement at  
 24 bundle {D1/5/8}, paragraph 10.15. A short question  
 25 only. Here you say -- this is one of your personal

71

1 statements, it is not an agreed statement. At page 8,  
 2 paragraph 10.15, you say:  
 3 "The controls around branch account data do not  
 4 specifically consider if the monies within the  
 5 transaction actually go to the correct accounts. It  
 6 would be possible through simple changes to alter the  
 7 sort code and account number of the destination account  
 8 and unless this was spotted by the PM or the client,  
 9 Post Office system would not detect this."  
 10 Now, you then go on to talk about defects in Horizon  
 11 reference data, yes?  
 12 A. Yes.  
 13 Q. Just to be clear, the second paragraph there has nothing  
 14 to do with remote access, does it?  
 15 A. It has nothing to do with the way that you have set out  
 16 that you want remote access dealing with in this  
 17 section, no.  
 18 Q. Thank you. Now the first paragraph, I don't need to ask  
 19 you much, but is the scenario you are suggesting here  
 20 that a criminal working in Fujitsu could, if he wanted  
 21 to, spot that a payment was being, an electronic payment  
 22 was being made by a customer at an branch, identify the  
 23 payment that was being made, hack into the system to  
 24 change the sort code and account number of the  
 25 destination account, and by that means secure that the

72

1 payment, instead of being made in payment of a bill to  
 2 British Gas, it goes into his own bank account. Is that  
 3 the scenario you are raising there?  
 4 A. Yes. It doesn't require the hacking that you suggest  
 5 but, yes, that's what I'm --  
 6 Q. You are quite right, when I said "hacking", I'm speaking  
 7 in a -- I need to be more --  
 8 A. Yes. But the rest of that scenario is --  
 9 Q. So someone with privileged user abilities?  
 10 A. Yes.  
 11 Q. And which -- presumably he wouldn't be doing this in the  
 12 branch accounts, he would not be changing the data in  
 13 the branch accounts. If you are talking about the sort  
 14 code and destination account, he would be changing the  
 15 data that's passed through to Post Office, wouldn't he?  
 16 A. Yes.  
 17 Q. So we are not talking about data in the branch accounts  
 18 because that doesn't contain that sort of data, does it?  
 19 A. No, if this was going to go on it would go on at  
 20 Fujitsu's back office --  
 21 Q. It would be some sort of change to some Post Office  
 22 system, yes?  
 23 A. Yes.  
 24 Q. And it would be -- so what happens is a bill payment  
 25 transaction is done at the branch. It is transmitted

73

1 through to Post Office's back systems, so it goes out of  
 2 BRDB and goes into Post Office's systems. It waits  
 3 there for a while before it is then transmitted onwards  
 4 to the bank to actually make the payment?  
 5 A. Yes.  
 6 Q. And what you are suggesting is that a clever criminal  
 7 who happens to have privileged user rights would, in  
 8 that limited period of time, while the data is waiting  
 9 there ready to be sent off to the bank, use his  
 10 privileged user rights. Would he be doing this with  
 11 SQL?  
 12 A. He could do it with SQL. He might be able to do it  
 13 using the TIP repair tool, I'm not --  
 14 Q. Right. And by that means he would ensure that the  
 15 payment goes to himself rather than --  
 16 A. It would go to a different bank account.  
 17 Q. And in that scenario, of course, the customer who had  
 18 actually made the bill payment would immediately go back  
 19 to the branch and say "What the hell has happened?  
 20 I have paid my phone bill but I have just been cut off".  
 21 We have seen examples of that happening, haven't we?  
 22 A. Yes, there are a couple of scenarios where payments have  
 23 gone to wrong parties because of erroneous --  
 24 Q. So the kind of criminal that we are talking about, as  
 25 well as being a master criminal because he has got

74

1 privileged user rights and has the ability to use them,  
 2 so he is obviously of some seniority within Fujitsu, he  
 3 would also have to be an idiotic criminal, wouldn't he,  
 4 because that would be a step which would be bound as  
 5 night follows day to get detected because there would be  
 6 an investigation, wouldn't there, as to what happened to  
 7 the payment?  
 8 A. Yes.  
 9 Q. And on that investigation it would be discovered where  
 10 the money actually went and why it was that it got  
 11 there?  
 12 A. That bit is not as easy as you suggest, but yes, there  
 13 would be an investigation.  
 14 Q. And it would be possible, it may not be easy, but in  
 15 circumstances where money has gone in completely the  
 16 wrong direction, that would absolutely be something --  
 17 you have seen this with Fujitsu themselves, with the  
 18 Highland Council, it is something they took very  
 19 seriously indeed and they acted on it very quickly,  
 20 didn't they?  
 21 A. Mm.  
 22 Q. There would be an in-depth investigation to make damn  
 23 sure they knew what had happened, yes?  
 24 A. Yes.  
 25 Q. So in practice anyone working at Fujitsu would know very

75

1 well that it would be professional suicide to try  
 2 a stunt like that, yes?  
 3 A. Yes.  
 4 Q. And you would need to be quite well qualified. You say  
 5 simple, I think, but you would really have to have  
 6 a good understanding of the system and know which tables  
 7 to be looking at and what changes are to be made in a  
 8 way that didn't create some reconciliation error  
 9 somewhere else in the system. It would be quite  
 10 a sophisticated process. Your knowledge of the system  
 11 would have to be quite substantial, yes?  
 12 A. I have seen two or three of these and investigate them  
 13 and have a look at what has been actually done, in some  
 14 they have got away with it and in others they have been  
 15 caught.  
 16 Q. In the real world you have no reason for thinking that  
 17 has ever happened in Post Office, have you?  
 18 A. No.  
 19 Q. If I can ask you to look back at your report at page 245  
 20 {D2/4.1/245}, paragraph 5.427, this is where -- perhaps  
 21 we can go to the previous page so we can see the heading  
 22 {D2/4.1/244}. It is all under the heading "Global  
 23 Users", do you see? And you very fairly indicated that  
 24 in the light of the evidence you changed your mind, and  
 25 that is extremely helpful.

76

1 A. Yes.  
 2 Q. If we go to page 245, having addressed the question  
 3 whether global users have the ability to undertake  
 4 remote access, you then say:  
 5 "Also it is not (in my opinion) a question of  
 6 whether DBAs misused their powers, it is more important  
 7 to consider (in respect of their actions) whether they  
 8 might have erroneously (without intent) modified data."  
 9 That's true, isn't it? In the real world that's  
 10 what we should be focusing on. We don't need to focus  
 11 on hypotheses as to master criminals seeking to steal  
 12 someone's gas bill, do you agree?  
 13 A. Yes.  
 14 Q. Let's move to what I call remote access proper. Let's  
 15 take Legacy Horizon first. If we can go to bundle D1,  
 16 the joint statement again {D1/5/4}. This is where you  
 17 set out the form of remote access that you are aware of.  
 18 A. Yes.  
 19 Q. "In Legacy Horizon, rebuilding transaction data in the  
 20 branch, by replication from some other copy of the  
 21 data."  
 22 Stopping there, I think we have already agreed that  
 23 that -- first of all, it is certainly possible, it is  
 24 discussed by all the witnesses, but that's something  
 25 which enhances robustness rather than detracts from it,

1 yes?  
 2 A. There's two separate elements in there. There is the  
 3 automated way, which I agree is the way that the process  
 4 should work, but when the automated way sometimes fails,  
 5 there is a manual way where Fujitsu need to copy the  
 6 messages from the broken till or the till that has been  
 7 removed from site -- the counter that's been removed  
 8 from site. They need to get the messages from there.  
 9 They make a modification to those messages and they then  
 10 import those messages that they have recovered onto the  
 11 live systems.  
 12 Q. So what you are referring to is what Mr Parker discusses  
 13 I think in his third witness statement, is that right?  
 14 A. That may be right.  
 15 Q. Let's see if we can find it. Would you give me  
 16 a moment.  
 17 A. It might be Parker 2.  
 18 Q. Say again?  
 19 A. It might be Parker 2.  
 20 Q. His second witness statement. Thank you very much,  
 21 that's very helpful. Let me see if I can find it there.  
 22 My learned friend Mr Draper suggests it is in  
 23 paragraph 38 so he gets the blame if it is wrong. It is  
 24 at page {E2/12/12}. I apprehend this is what you are  
 25 thinking of.

1 38:  
 2 "For completeness, in the rare circumstances where  
 3 it was necessary for Fujitsu to rebuild transaction data  
 4 in Legacy Horizon [Mr Parker says] there were three  
 5 possible scenarios."  
 6 38.1:  
 7 "When a counter failed and there was a complete  
 8 replication of that counter's transactions elsewhere,  
 9 Fujitsu simply deleted the message (transaction) store  
 10 on the faulty counter and used the standard facilities  
 11 of the Riposte software to re-build the data from the  
 12 replicated copy."  
 13 And we have discussed that.  
 14 38.2:  
 15 "Where no replicated copies of the transactions  
 16 existed on the network, Fujitsu would physically  
 17 retrieve the disk from the faulty counter. The disc  
 18 should hold all of the transactions that had taken place  
 19 on the counter. At its own office, the SSC would  
 20 extract the transaction data and deliver it to the  
 21 replacement counter without amending that data. The SSC  
 22 would need the Subpostmaster's memory card (AKA PMMC) to  
 23 de-encrypt the data."  
 24 Is that right?  
 25 A. Yes.

1 Q. "This was a physical card ... and Fujitsu would have to  
 2 borrow one so the subpostmaster would know what was  
 3 happening."  
 4 Would that be fair?  
 5 A. Yes.  
 6 Q. "If Fujitsu were to change anything, it would be to  
 7 remove the envelope around the transaction data."  
 8 Do you see that?  
 9 A. Yes.  
 10 Q. Do you accept that?  
 11 A. Yes. They go through a process of stripping the CRC off  
 12 and then recreating it afterwards.  
 13 Q. "The envelope contains the system admin data, i.e. the  
 14 sequence number of the data and its ID. Fujitsu would  
 15 not change the transaction data itself and in removing  
 16 the envelope data, they would simply be allowing the  
 17 system to automatically re-number the transactions when  
 18 they were re-inserted."  
 19 Does that make sense?  
 20 A. I'm not sure about the automatically renumber them. The  
 21 documents that I have seen make reference to a manual  
 22 renumbering of the transactions before --  
 23 Q. You have seen documents which talk about manual  
 24 re-numbering, have you?  
 25 A. Yes.

1 Q. Do you recall where those documents are?  
 2 A. The reference is to using the tool Text Pad, the text  
 3 editor to make the changes.  
 4 Q. Are we talking about PEAKs or --  
 5 A. It is a PEAK, I believe.  
 6 Q. Is this discussed in any of your reports? I'm not  
 7 building a big criticism, it is just this comes as news  
 8 to me and I'm wondering if I missed it?  
 9 A. I don't know if it is referenced in my reports or not.  
 10 If I could search, I could find it for you.  
 11 Q. Shall we give you some quick homework? Would that be  
 12 acceptable, my Lord, overnight?  
 13 MR JUSTICE FRASER: I have no objection. Are you able to  
 14 look at it after hours today?  
 15 A. Certainly, my Lord, yes.  
 16 MR JUSTICE FRASER: You might want -- so that is your  
 17 second, I think. That's his second. I see you are  
 18 taking a list. Have you got a list?  
 19 A. Yes, I have got it on here.  
 20 MR DE GARR ROBINSON: So what you are suggesting is it  
 21 wouldn't be automatic, the numbering would be manual.  
 22 A. I have certainly seen a document when the messages in  
 23 the messagestore have been taken from a disk that has  
 24 failed, editing is suggested using Text Pad, some  
 25 numbering is changed. Then Fujitsu use a tool called

81

1 Message Factory and that creates the CRC check to go  
 2 round the messages, and then they use the Riposte import  
 3 command, I believe it is, and that imports it back into  
 4 the branch.  
 5 Q. Well, perhaps we could see the document you are  
 6 referring to before -- I don't want to take up time  
 7 unnecessarily now. But you would accept, would you,  
 8 that for this to have a detrimental impact on branch  
 9 accounts there would have to be some quite surprising  
 10 error made. I mean there would have to be some change  
 11 actually made to the underlying transaction data and  
 12 that change would be erroneous?  
 13 A. Yes.  
 14 Q. And you see Mr Parker saying that Fujitsu's practice was  
 15 not to make changes to transaction data?  
 16 A. Yes.  
 17 Q. Are you aware of anything in the system, in the design  
 18 documents or other documents that you have seen, which  
 19 would indicate that -- or any PEAKs that you have seen  
 20 which would indicate that that had actually happened,  
 21 that any changes had been made to transaction data?  
 22 A. Well, the one that I'm referencing at the moment, there  
 23 is a change being made to the --  
 24 Q. To the number of the transactions, yes?  
 25 A. There's a couple of elements. I think the counter code

82

1 is changed to make it appear that it had been entered on  
 2 a different counter than it actually had been done on,  
 3 and there was a change to some sort of -- it might have  
 4 been a serial number or a transaction number that was  
 5 on.  
 6 Q. But not a change to any basic transaction detail, price,  
 7 product or anything of that sort?  
 8 A. No. The PEAK was suggesting which elements of the  
 9 messages should be changed before the upload takes  
 10 place. The PEAK didn't say change a value, so it would  
 11 have to be a mistake. The real mistake with that would  
 12 be not getting all of the transactions, or accidentally  
 13 duplicating a transaction.  
 14 Q. Wouldn't you just be taking a copy of what's in the  
 15 messagestore?  
 16 A. Yes, but you are then opening up the messagestore in  
 17 a text editor, and whenever you are moving data between  
 18 an environment where it has some structural integrity  
 19 into a text editor then there's always the danger that  
 20 things --  
 21 Q. So you are suggesting that -- the intention wouldn't be  
 22 to change anything, but you're saying there might be  
 23 a mistaken change of something, yes?  
 24 A. I think the necessity is you do have to change something  
 25 because I do not think you can import the data into

83

1 another counter in the same way, because it has  
 2 a counter ID in there and I think that has to be  
 3 changed.  
 4 Q. You are right, my question was too loose. There  
 5 wouldn't be an intention to change transaction data but  
 6 you are saying there might be a mistake made which  
 7 results in a change to transaction data that was held on  
 8 a machine?  
 9 A. Yes, or an omission of a message.  
 10 Q. Would you accept that -- first of all, how many  
 11 occasions of that are you aware of? Have you just seen  
 12 one PEAK or is it more?  
 13 A. There's not many PEAKs -- there are quite a few PEAKs  
 14 that talk about the Riposte import commands that suggest  
 15 throughout --  
 16 Q. That is different though. That is transaction  
 17 insertions, yes? We are not talking about rebuilding  
 18 data now.  
 19 A. But that's the process that you rebuild the data.  
 20 Q. I see.  
 21 A. You get them from another counter or a failed disk, you  
 22 edit them and then you import them, you insert them into  
 23 a working counter.  
 24 Q. But the particular process that we are talking about  
 25 now, involving taking data off the machine and injecting

84

1 those transactions, how many occasions of that are you  
 2 aware of in the documents you have reviewed and --  
 3 A. I haven't searched specifically for that. I almost  
 4 tripped over that document. But I have only seen  
 5 a handful.  
 6 Q. Would it be possible for you to bring a list of the  
 7 handful to court tomorrow?  
 8 A. Yes.  
 9 Q. Thank you. I think, and you may already have accepted  
 10 this but I ought to put it just in case you haven't, you  
 11 would accept, wouldn't you, bearing in mind the evidence  
 12 you have heard and the documents you have seen relating  
 13 to Fujitsu's own processes, that that process would  
 14 involve careful review by two pairs of eyes, yes?  
 15 A. Yes, I believe so.  
 16 Q. So in the real world again would you accept that the  
 17 chances of that happening, going wrong and causing  
 18 an erroneous entry in branch accounts that were not  
 19 intended, would be very, very low. Would you accept  
 20 that?  
 21 A. It would be low, yes.  
 22 Q. Thank you. Now are there any other forms of data  
 23 rebuilding that you believe ought to be discussed in  
 24 this context or shall I move on to a different form  
 25 of --

85

1 A. Yes, I'm happy for you to move on.  
 2 MR JUSTICE FRASER: Do you mean off the list, back to the  
 3 list?  
 4 MR DE GARR ROBINSON: Yes. Shall I move to a different form  
 5 of remote access, or is there another aspect to  
 6 rebuilding transaction data in the branch that Mr Coyne  
 7 is aware of and would wish to discuss?  
 8 MR JUSTICE FRASER: Mr Green, either stand up and make  
 9 an objection or don't, but sotto voce exchanges across  
 10 court are really not very helpful.  
 11 MR GREEN: I apologise, my Lord.  
 12 MR JUSTICE FRASER: They also put witnesses in a difficult  
 13 position.  
 14 MR GREEN: When Mr Roll was cross-examined he was taken to  
 15 38.1 and 38.2 and not 38 -- the same thing is about to  
 16 happen again.  
 17 MR JUSTICE FRASER: But if Mr de Garr Robinson doesn't want  
 18 to put a particular point then he is not putting  
 19 a particular point. But if you are laying a flag down  
 20 that he ought to --  
 21 MR DE GARR ROBINSON: I think that's very helpful. I'm glad  
 22 my learned friend has talked about that.  
 23 MR JUSTICE FRASER: Can I just make it clear to both of you  
 24 generally, although it is really aimed at you, Mr Green,  
 25 I have a very light touch on how counsel conducts

86

1 cross-examination in a time-limited trial.  
 2 MR GREEN: I'm grateful, my Lord.  
 3 MR JUSTICE FRASER: That sort of exchange is not helpful.  
 4 MR GREEN: I'm most grateful, my Lord.  
 5 MR DE GARR ROBINSON: If you look at the witness statement,  
 6 the next page [E2/12/13], then there's what Mr Parker  
 7 describes as the rare case:  
 8 38.3:  
 9 "... where Fujitsu was not able to access a portion  
 10 of the transaction data from the desk then we would  
 11 replicate transactions as far as we were able to and  
 12 would notify Post Office and Subpostmaster of this and  
 13 any information we had on the extent and potential  
 14 timing of any missing transactions."  
 15 So in relation to that then, that possibility  
 16 obviously would involve a debate, wouldn't it, including  
 17 the subpostmaster and Post Office, yes?  
 18 A. Yes, it would.  
 19 Q. And because the transaction -- the data couldn't be  
 20 obtained, presumably because the machine doesn't work,  
 21 then everyone would know that the data couldn't be  
 22 obtained and they would be addressing what should happen  
 23 as a result of that data being missing, yes?  
 24 A. Although this does remind me of another one that I will  
 25 find for you overnight, and that's where I believe the

87

1 subpostmaster was told that they couldn't recover the  
 2 transactions, so the subpostmaster put the transactions  
 3 back in manually from his or her own paper copy, and  
 4 then Fujitsu did manage to recover the transactions and  
 5 inserted them, which caused a doubling of the  
 6 transactions.  
 7 Q. Right. We are talking about -- so you found one  
 8 occasion when something like that happened?  
 9 A. That I was reminded of from that, yes.  
 10 Q. Whenever these things happen they are recorded in PEAKs,  
 11 yes?  
 12 A. This was recorded in a PEAK, yes.  
 13 Q. But by virtue of the way we all know Fujitsu works, if  
 14 it happens it would be recorded in a PEAK?  
 15 A. It should be recorded in a PEAK, yes.  
 16 Q. It would be very surprising if it wasn't recorded  
 17 somewhere in a PEAK, yes? And you are aware of one  
 18 occasion where that happened, yes?  
 19 A. Yes.  
 20 Q. If you could let me have a copy of the PEAK tomorrow  
 21 that would be very helpful, thank you.  
 22 A. Just with regard to the PEAK. PEAKs are raised at third  
 23 line Fujitsu. So when you say Fujitsu would do whatever  
 24 they would do, it would be effectively the SSC. So if  
 25 the call gets to the SSC level then that's when the PEAK

88

1 would be created. There might be other elements of  
 2 Fujitsu that they do other things.  
 3 Q. But of course if a call didn't get to the SSC, then  
 4 there wouldn't be any question of any remote access,  
 5 would there?  
 6 A. No, not necessarily. If a call didn't get to SSC then  
 7 Post Office has decided that it would deal with it using  
 8 some of its own methods, so issuing a TC --  
 9 Q. I'm sorry, I'm really confused, Mr Coyne. When you say  
 10 deal with "it", what are we talking about?  
 11 A. Deal with the situation --  
 12 Q. The purpose of the discussion we are having today is to  
 13 discuss remote access. Remote access, correct me if I'm  
 14 wrong, is what can be done by the SSC when seized of  
 15 a problem, yes?  
 16 A. Yes, but you then took me --  
 17 Q. If I could just -- yes, is that right?  
 18 A. Yes.  
 19 Q. So in the context that we are discussing it now, we are  
 20 always talking about something in relation to which the  
 21 SSC is already involved, yes?  
 22 A. Yes.  
 23 Q. And so when you suggest now that there are situations  
 24 when the SSC isn't involved, I don't know what those  
 25 situations are, but what I want to suggest to you, and

89

1 to save some time, is that whatever those situations  
 2 involve, they don't involve remote access of the sort  
 3 with which I'm concerned today. Would you accept that?  
 4 A. I would accept that. The answer that I gave is because  
 5 you asked me about whether something would be recorded  
 6 in a PEAK or not.  
 7 Q. Yes.  
 8 A. And I give you the answer that if the subpostmaster  
 9 called Post Office to tell them that there was then  
 10 a doubling of their transactions as a result of this,  
 11 that that in itself would not raise a PEAK until that  
 12 call went all the way through to Fujitsu SSC and the  
 13 PEAK would be raised then.  
 14 Q. Yes. Are you suggesting -- so you are suggesting  
 15 a situation where a branch has already got through to  
 16 the SSC and the SSC has done some rebuilding of data.  
 17 The branch then has a problem -- the branch knows there  
 18 has been some rebuilding of data, I think we discussed  
 19 that, yes? And the branch then sees there has been  
 20 a doubling of transaction and phones up the helpline.  
 21 Now in that hypothetical call the postmaster would say  
 22 "This has just happened. The Fujitsu -- the third tier  
 23 support has been helping me with my data but I have this  
 24 problem because now I have a duplicate transaction".  
 25 You are not suggesting, are you, that that call wouldn't

90

1 get passed back to SSC to be looked at by the people who  
 2 did the original whatever the transaction insertion was?  
 3 A. I'm not suggesting any of that. I'm answering your  
 4 question as precisely as possible. You asked me whether  
 5 it would be recorded in a PEAK and I explained the  
 6 process to you when the PEAK gets raised.  
 7 Q. So in the scenario you have just hypothesised, the  
 8 overwhelming likelihood is that it would get through  
 9 back to the SSC and it would be picked up in a PEAK,  
 10 probably the same PEAK, yes?  
 11 A. That is the process that should be followed, but  
 12 initially the call would go into the Post Office and the  
 13 Post Office would investigate it and they would make  
 14 a decision whether that call should go through to  
 15 Fujitsu or not. And then it would be recorded in  
 16 a PEAK.  
 17 Q. Thank you. Now, no other forms of data rebuilding that  
 18 are in your mind that you wish to talk about? Why don't  
 19 I give you an opportunity to look through  
 20 paragraphs 10.2 -- perhaps pages 4 through to 6. Is  
 21 there any other aspect of rebuilding of data that we  
 22 haven't covered, in your expert view? {D1/5/4} {D1/5/6}  
 23 (Pause)  
 24 A. No, I'm happy with what's covered in that statement.  
 25 Q. Thank you. If we could then go back to page 4 and look

91

1 at the next item {D1/5/4}. The second form of remote  
 2 access. You say:  
 3 "In Legacy Horizon, injection of an additional  
 4 message in the branch messagestore."  
 5 A. Yes.  
 6 Q. The standard way of doing it, I believe you will accept,  
 7 is doing it via the correspondence server which, when  
 8 a transaction is inserted, would leave an indication  
 9 that the counter on which the transaction was done was  
 10 greater than the number of 32, correct?  
 11 A. Well, it depends really at what time of day the message  
 12 is inserted. Messages are not always at the  
 13 correspondence server --  
 14 Q. I'm trying to explore that there is a standard way of  
 15 doing it and then an alternate way of doing it that  
 16 doesn't involve doing it through the messagestore, yes?  
 17 A. I don't believe it is a case of one is standard and one  
 18 is nonstandard. It depends on whether you are making  
 19 a modification after messages have been sent to the  
 20 correspondence server or whether they haven't yet gone  
 21 from the branch to the correspondence server.  
 22 Q. Let's look at what Mr Parker says about that. It is at  
 23 {E2/12/9}. Perhaps I could ask you to read what he says  
 24 in paragraphs 27 through to 28, please.  
 25 (Pause)

92

1 A. Yes, I can see that.  
 2 Q. You have read it?  
 3 A. Yes.  
 4 Q. And you will see at the end of paragraph 27, he says:  
 5 " ... it would have been injected into the  
 6 correspondence server ([this was] the default option  
 7 which was followed in the vast majority of cases )."  
 8 Are you in a position to disagree with that?  
 9 A. No.  
 10 Q. Thank you. Then he discusses a PEAK, PC0175821. You  
 11 are familiar with that PEAK, it is referred to in your  
 12 reports.  
 13 A. Yes.  
 14 Q. Is his treatment of that PEAK fair?  
 15 A. We probably should just check on that PEAK. Could I see  
 16 that PEAK?  
 17 Q. Yes. It is at {F/485/1}.  
 18 There you are, Mr Coyne.  
 19 A. Can we go on to the next page please {F/485/2}. Next  
 20 page, please {F/485/3}. And again, please {F/485/4}.  
 21 Sorry go back one, please {F/485/3}.  
 22 Yes, okay, so it looks as if -- yes, messages  
 23 prepared for insertion. Yes, I think what Mr Parker  
 24 said --  
 25 Q. So it is a fair account of what happened. And it is

93

1 true, isn't it, that the messages were inserted with the  
 2 additional property comment PC0175821 to allow them to  
 3 be identified in the audit trail. Do you accept that?  
 4 A. Yes.  
 5 Q. And do you accept Mr Parker's evidence that that was the  
 6 practice that was adopted when using transaction  
 7 insertions which wouldn't be automatically identifiable  
 8 because of the high number of the counter that would be  
 9 recorded?  
 10 A. Sorry, with the high number of?  
 11 Q. Transactions that are entered into at the correspondence  
 12 server are easily identifiable because the counter  
 13 number that you see in the transaction log and the  
 14 events log is a counter number that doesn't exist in the  
 15 branch, yes? It is a counter number that is greater  
 16 than 32?  
 17 A. I believe that that's the process, but I have seen  
 18 occurrences where the counter number of not 32 has been  
 19 used. Less than 32.  
 20 Q. When it is done by the correspondence server the  
 21 evidence that has been given is that that records  
 22 a counter number that is greater than 32. Are you  
 23 saying you have seen instances where the correspondence  
 24 server has been used but a lower counter number has been  
 25 recorded?

94

1 A. Yes.  
 2 Q. Why isn't that in any of your reports?  
 3 A. It was a recent -- it was since this report has been --  
 4 Q. It is quite difficult -- this time I'm not blaming you,  
 5 Mr Coyne, but it is very difficult to conduct  
 6 a cross-examination in circumstances where the goalposts  
 7 seem to be moving all the time.  
 8 Let me just move on. Perhaps I will say this --  
 9 A. Should I include that in the homework?  
 10 Q. Yes. I'm sorry to burden everyone with this. I'm  
 11 anxious that I'm not giving you an opportunity to put in  
 12 a supplemental report by the provision -- I don't mean  
 13 this as a criticism, you are doing this in answer to my  
 14 questions, but in effect we are in a situation where new  
 15 evidence is being given which it would have been helpful  
 16 to have seen in a supplemental report. But yes, please:  
 17 MR JUSTICE FRASER: All you are being asked to do is  
 18 actually identify the document that you are talking  
 19 about.  
 20 MR DE GARR ROBINSON: Yes.  
 21 A. Yes, my Lord.  
 22 MR DE GARR ROBINSON: I would really not have an exegesis.  
 23 MR JUSTICE FRASER: Yes. There's nothing other than the  
 24 documents.  
 25 MR DE GARR ROBINSON: My Lord, yes.

95

1 Would you accept that the thrust of Mr Parker's  
 2 evidence that Fujitsu's practice, when there was a risk  
 3 of the nature of the transaction insertion not being  
 4 readily identifiable, that steps would be taken to make  
 5 it identifiable such as by adding comments of the sort  
 6 he refers to there?  
 7 A. Yes, that's certainly the process.  
 8 Q. You would accept, wouldn't you, that Fujitsu was not in  
 9 the business of making changes that weren't readily  
 10 identifiable at least when a close look is taken, yes?  
 11 A. I agree that wouldn't be their desire.  
 12 Q. From all the PEAKs and so on that you have seen, you  
 13 would accept that their approach is consistent with  
 14 wanting to make the changes that they make readily  
 15 identifiable, yes?  
 16 A. There are a number of anomalies but, yes, I accept that  
 17 they --  
 18 Q. I'm not going to ask you about anomalies, Mr Coyne.  
 19 You will see that in paragraph 29 of his witness  
 20 statement Mr Parker had asked one of his colleagues to  
 21 search the incident management system, that's the PEAK  
 22 database, for incidents that required injecting data  
 23 into the counter --  
 24 MR JUSTICE FRASER: Just hold on one second. We were on 39,  
 25 you want paragraph 29?

96

1 MR DE GARR ROBINSON: It is paragraph 29 at page {E2/12/10}.  
 2 I'm sorry.  
 3 MR JUSTICE FRASER: Yes, thank you. We have caught up.  
 4 That's all right.  
 5 MR DE GARR ROBINSON: You will see what he says in  
 6 paragraph 29.  
 7 A. Yes.  
 8 Q. I presume you reviewed the documents that he refers to  
 9 in his footnote?  
 10 A. Yes, I did.  
 11 Q. And do you accept that he correctly characterises the  
 12 impact of those documents or the effect of those  
 13 documents?  
 14 A. What does he say is the impact of the documents?  
 15 Q. Paragraph 29.  
 16 A. Yes.  
 17 Q. There was fixing a Riposte index at the counter. 29.2,  
 18 removing a historic message that was influencing the  
 19 balancing process. And so on. And he says in  
 20 paragraph 30:  
 21 "In total, data was injected into the counter on 14  
 22 occasions. However transactions were injected in only  
 23 one of these cases, namely the case described in  
 24 paragraph 29.5 above."  
 25 And that's PC0175821.

97

1 A. This witness statement was very helpful because this is  
 2 the first time that we see how the message injection was  
 3 actually done and the terms were suggested what we could  
 4 search for. I haven't been and looked at these  
 5 documents and benchmarked them specifically whether they  
 6 were against those particular characteristics that were  
 7 pointed out in 29.1 and 29.6.  
 8 Q. So would I be right in thinking you are not in  
 9 a position to dissent from what Mr Parker says in  
 10 paragraph 29?  
 11 A. That is the position, yes. I believe that this report  
 12 was only the day before my report was due. This witness  
 13 statement.  
 14 Q. You seem to have considered quite a lot of things since  
 15 you produced your second report. Did you not consider  
 16 what Mr Parker says here and the documents he refers to?  
 17 A. No, I hadn't got the information to be able to ask the  
 18 question that you put to me then, whether these specific  
 19 PEAKs address those six things.  
 20 Q. And you are not in a position to suggest that the search  
 21 that he describes in paragraph 29 yielded 14 occasions  
 22 on which only one involved an insertion of transaction  
 23 data? You are not in a position to challenge that?  
 24 A. I'm not in a position to challenge that.  
 25 Q. Would you accept that the search that is described in

98

1 paragraph 29, that is a sensible set of terms to use  
 2 when searching for the kind of transaction insertion we  
 3 are talking about?  
 4 A. Well, I didn't know that at the time, that these were  
 5 the sort of words that you should use to search for  
 6 message insertion. That is something that both myself  
 7 and Dr Worden had been looking for for a little while so  
 8 it was good to have that confirmed. And after looking  
 9 at the messages, that Riposte, and I think there is  
 10 Riposte import as well, that's one that I found as well,  
 11 so it was helpful. The search terms do look to be --  
 12 Q. Do you accept, though, that those search terms are  
 13 likely to capture the sort of transactions that we are  
 14 talking about now?  
 15 A. They do. They don't include the word "Riposte import"  
 16 or "message import", which is the one that I have since  
 17 used, so whether that brings back additional messages,  
 18 I'm not sure.  
 19 Q. So you have done your own searches now, have you?  
 20 A. After seeing these words here I have looked at those  
 21 documents and found the command Riposte import in some  
 22 of those documents, so I have gone back to search for  
 23 that across the whole database.  
 24 Q. And are you in a position to suggest that the basic  
 25 thrust of what he says in paragraphs 29 and 30, that the

99

1 number of occasions where this happened and involved  
 2 injecting transaction data was very low?  
 3 A. The number will be relatively low, yes.  
 4 Q. It's always dangerous to ask but we are talking about  
 5 a handful of occasions, no more than that, yes, during  
 6 the life of Legacy Horizon?  
 7 A. It is probably best for me to actually run the searches  
 8 and give you the actual numbers.  
 9 Q. I really don't want you to be doing more research,  
 10 Mr Coyne. I understood you to be telling me that you  
 11 had already done it, and I'm simply asking you whether  
 12 in the course of doing that search you found more than  
 13 a handful. Perhaps we will leave it at that question.  
 14 Perhaps you could answer it now?  
 15 A. It will be in the tens but I don't know how many tens.  
 16 Q. You mean in the low tens? Between ten and twenty?  
 17 A. In all honesty, I would prefer to run the answers and  
 18 give you a proper answer. If I had had sight of this  
 19 document in enough time before preparing my report, then  
 20 I would have provided a proper response to it.  
 21 MR DE GARR ROBINSON: Yes. My Lord, is this a convenient  
 22 moment?  
 23 MR JUSTICE FRASER: I think it is.  
 24 MR DE GARR ROBINSON: This is going slower than  
 25 I anticipated. Your Lordship may appreciate.

100

1 MR JUSTICE FRASER: I had noticed.  
 2 MR DE GARR ROBINSON: It is a voyage of discovery in certain  
 3 respects.  
 4 MR JUSTICE FRASER: I can tell .  
 5 MR DE GARR ROBINSON: I wonder whether your Lordship would  
 6 be willing to sit at 1.50 pm as you were yesterday?  
 7 MR JUSTICE FRASER: I would rather sit past 4.25/4.30/4.35,  
 8 for the reason I explained yesterday, and we can start  
 9 at 10.15 in the morning.  
 10 MR DE GARR ROBINSON: I'm much obliged to your Lordship.  
 11 MR JUSTICE FRASER: What we are going to do, I'm just going  
 12 to have a stock take with you very briefly now, because  
 13 junior counsel doubtless between them will be doing this  
 14 but I just want to check. How many items have you got  
 15 on your list?  
 16 A. Three.  
 17 MR JUSTICE FRASER: Right. The first one is looking for the  
 18 evidential references or the evidential reference to  
 19 a number?  
 20 A. Yes.  
 21 MR JUSTICE FRASER: Just pause there.  
 22 I did say to you at the morning break that I would  
 23 come back to you at 1 o'clock about whether you wanted  
 24 that done at the short adjournment or whether you would  
 25 be happy to have it in the morning?

101

1 MR DE GARR ROBINSON: Bearing in mind my timing concerns,  
 2 I suspect it is very unlikely that I will be  
 3 cross-examining Mr Coyne on any of the material that he  
 4 produces.  
 5 MR JUSTICE FRASER: Understood.  
 6 MR DE GARR ROBINSON: So it doesn't have to be done by --  
 7 MR JUSTICE FRASER: Understood.  
 8 All right, Mr Green, can you just make arrangements  
 9 insofar as necessary that a bundle of the witness  
 10 statements in hard copy is available for Mr Coyne by  
 11 4.30 pm so he can take it with him to look through and  
 12 find that reference.  
 13 MR GREEN: My Lord, I do not think it is in the witness  
 14 statements.  
 15 MR JUSTICE FRASER: Well, the expression used was "in the  
 16 evidence", so that was where I assumed it would be.  
 17 MR GREEN: Yes. I think that's where the misunderstanding  
 18 arose.  
 19 MR JUSTICE FRASER: Right. I'm not going to say anything  
 20 else and we will come back at 2 o'clock.  
 21 (1.02 pm)  
 22 (The short adjournment)  
 23 (2.00 pm)  
 24 MR DE GARR ROBINSON: Mr Coyne, good afternoon.  
 25 A. Good afternoon.

102

1 Q. We were talking about transaction insertions in  
 2 Legacy Horizon and I recall that you mentioned earlier  
 3 on the \$1,000 PEAK, and that was a transaction injection  
 4 so this may be a good moment to talk about it .  
 5 Could I ask you to go to {F/432/1}, please. This  
 6 is -- do you recall this PEAK?  
 7 A. Yes, I think I do.  
 8 Q. It has been cited quite a lot by Mr Green. In your  
 9 second report, we don't need to go to it but it is at  
 10 paragraph 3.232, I think, or it may be 3.234, my note  
 11 isn't clear, but it doesn't matter. {D2/4.1/75}  
 12 You make two essential points about this PEAK.  
 13 First of all you say there was no settlement value for  
 14 the transaction and this was corrected by a transaction  
 15 insertion, and then you say but a \$1,000 loss was  
 16 identified afterwards. Would I be right in thinking  
 17 that your implication was that that loss may have been  
 18 caused by the transaction insertion, yes?  
 19 A. Yes.  
 20 Q. Secondly, you point out that in the PEAK the view is  
 21 expressed that it is best that the postmaster be not  
 22 informed about the problem because it was resolved  
 23 before roll-over, do you remember that?  
 24 A. Yes, I think this is the one. Yes.  
 25 Q. So here is an apparent exception to the general practice

103

1 of telling postmasters what's going on. Are you aware  
 2 of any other exceptions?  
 3 A. No, I don't believe so.  
 4 Q. Let's look at the PEAK. It is dated 10th December,  
 5 2007. The call logger on the top right-hand side is  
 6 MSU-Indt Mgt. What does that signify? What does MSU  
 7 signify?  
 8 A. Management support unit?  
 9 Q. Yes. And so this is therefore a report that comes in  
 10 not from the postmaster but from the MSU, because some  
 11 kind of exception has been thrown up, some kind of  
 12 report has been generated?  
 13 A. Yes.  
 14 Q. In the automatic monitoring processes that are operated  
 15 by MSU?  
 16 A. Yes.  
 17 Q. If we go down to the first box, it is dated  
 18 7th December. About four lines down:  
 19 "Summary: branch [there is the FAD code] TPSC257."  
 20 You will recall what TPSC257 is, won't you? It is  
 21 POLFS incomplete summaries report, yes?  
 22 A. Yes.  
 23 Q. And do you remember, it is a report which shows -- which  
 24 indicates that the information going into Post Office  
 25 through the TPS is incomplete?

104

1 A. Yes.  
 2 Q. Something has either been missed or wasn't there in the  
 3 first place.  
 4 A. Yes.  
 5 Q. And it is picked up automatically, yes?  
 6 A. Yes.  
 7 Q. And it is fair to say that that's one of the  
 8 countermeasures which exists within the Horizon system.  
 9 Where there are problems of this sort, this is  
 10 an automatic process which flags it and ensures that it  
 11 is investigated by the SSC?  
 12 A. Yes.  
 13 Q. Then, if we go down to 7 December at 10.35, it says:  
 14 "OCR 17493 has been raised. Sending to EDSC for  
 15 progression. While returning call, please include file  
 16 name in which outstanding data was sent to POLFS."  
 17 It is not difficult to ascertain what's happening  
 18 there. The OCR, what would that be designed to do?  
 19 A. I think it is operational change request. So it is  
 20 a request to change some data. Or correction request.  
 21 Q. It's a request to change some data in the TPS, isn't it?  
 22 There has been a problem with the TPS system and what  
 23 they are requesting is permission to make some change to  
 24 that data to deal with the problem, yes?  
 25 A. Yes.

105

1 Q. Then you see at 10.41, that's two boxes down, the  
 2 request is approved?  
 3 A. Yes.  
 4 Q. That's not the end of the problems. If we were stopping  
 5 there, that would just be a use I imagine of the TIP  
 6 repair tool, yes? That wouldn't be something that would  
 7 be particularly interesting, do you agree?  
 8 A. Possibly, yes.  
 9 Q. But we don't stop there. If we go to page {F/432/2}, at  
 10 the top it is said by Andy Keil:  
 11 "This is due to a single SC line written for \$1,000  
 12 (£484) with no settlement in the middle of two RISP  
 13 transactions."  
 14 So translating that into English, it appears to be  
 15 saying this is due to a single customer service line.  
 16 A. Served customer, I think.  
 17 Q. Written for \$1,000 with no settlement in the middle of  
 18 two remittance transactions?  
 19 A. Remittance in, yes.  
 20 Q. "On call ... the harvester exception was corrected and  
 21 now the transaction for the day don't zero, hence this  
 22 issue with the incomplete summaries report."  
 23 A. Yes. Something, so has gone wrong with Horizon at this  
 24 point because the top line there about the single SC  
 25 line being written with no settlement is an indication

106

1 that something has failed and this report has picked up  
 2 that --  
 3 Q. Yes, it is not simply that there has been a harvesting  
 4 problem in transmitting the data into the TPS, actually  
 5 there is a problem with the data in the BRDB itself in  
 6 the final accounts, in that the accounts seem to contain  
 7 a transaction which has no settlement line --  
 8 A. Yes.  
 9 Q. -- which can't be right.  
 10 A. Yes.  
 11 Q. The writer says:  
 12 "Am currently retrieving the messagestore for this  
 13 branch, we will then be inserting a new message on the  
 14 counter to remove the effects of this."  
 15 It refers to:  
 16 "OCP 17510 has been raised."  
 17 Do you see that?  
 18 A. Yes.  
 19 Q. Now, on roll-over what is being described here would  
 20 produce a receipts and payments mismatch, wouldn't it?  
 21 A. Yes.  
 22 Q. I think you have already agreed, but if you haven't  
 23 I would invite you to agree now, that on roll-over those  
 24 mismatches are always picked up automatically and  
 25 referred to the SSC for investigation, correct?

107

1 A. I'm not sure whether that is an automated process or not  
 2 or requires somebody to --  
 3 Q. Well, it arises that there are various TPSC reports, for  
 4 example 268A, 257, that are triggered when there is  
 5 a receipts and payments mismatch on roll-over, are you  
 6 familiar with that?  
 7 A. I was not sure of that process. I believed on roll-over  
 8 if there was a receipts and payments mismatch then  
 9 there's various options that then can be used. I didn't  
 10 know whether there was an automated process.  
 11 Q. What I'm suggesting to you, Mr Coyne, and perhaps you  
 12 will agree this and perhaps not, if a receipts and  
 13 payment mismatch appears on the roll-over of a branch it  
 14 will get referred to the SSC, it doesn't have to be  
 15 referred by a postmaster?  
 16 A. Right.  
 17 Q. The SSC will be seized of the matter --  
 18 A. Yes.  
 19 Q. -- even if the postmaster himself doesn't phone in, yes?  
 20 A. Okay.  
 21 Q. Do you accept that?  
 22 A. I accept that that's a reasonable process. I --  
 23 Q. You are not sure?  
 24 A. I'm not entirely sure that it is automated as suggested,  
 25 but that's perhaps --

108

1 Q. But the MSC produces reports to the SSC which explain  
2 that these exceptions have arisen on various TPSC  
3 reports. You must have seen --  
4 A. The MSC?  
5 Q. Sorry, the MSU, I do apologise. The MSU sends in,  
6 rather as happens here actually, a report saying  
7 an exception has arisen in this report and then the SSC  
8 looks into it. You have seen a large number of PEAKs of  
9 that sort, haven't you?  
10 A. Yes. So there is an automated report produced and then  
11 somebody would look at that report.  
12 Q. Thank you. So what happens is the system picks it up  
13 and a PEAK is created and then people start looking into  
14 what should happen, what has happened, yes?  
15 A. Nearly right. I think the PEAK would be created after  
16 somebody looks at it and decides a PEAK is required.  
17 Q. The PEAK is created when the MSU sends a report in to  
18 the SSC, correct?  
19 A. I'm not sure that is correct. I think the report is  
20 sent, somebody looks at the report, and then creates  
21 a PEAK if a PEAK is required.  
22 Q. I see. So what you are suggesting is a report is sent  
23 in and a human being looks at the report and then  
24 creates the PEAK?  
25 A. Yes.

109

1 Q. That is the process which is followed?  
2 A. Yes.  
3 Q. There is no process by which a report is sent in and  
4 then people sit on their hands and do nothing about it?  
5 A. I would hope not, no.  
6 Q. If we go down to 12 o'clock on 12th December:  
7 "As was suggested by Anne Chambers yesterday, there  
8 is a new exception on the TPSC257 (Incomplete Summaries  
9 Report) for 11/12/2007. The report shows further  
10 entries for this branch ..."  
11 Then down the page to 12.33 on 12th December -- I'm  
12 so sorry, down to right at the bottom of the page,  
13 17.19, I do apologise, and this is by Andy Keil again:  
14 "Worth noting that the branch didn't have any issues  
15 with the mismatched transactions because this was fixed  
16 before they did the roll. The branch is not aware of  
17 this and it is best that the branch is not advised."  
18 This is something that has been drawn attention to  
19 and I think you kindly said that this is the only  
20 example of something like this happening of which you  
21 are aware, yes?  
22 A. Yes, I can't think of anywhere else where it said  
23 expressly: don't contact the customer.  
24 Q. Then if we go to page {F/432/3} at 16.13:  
25 "As detailed above the two POLS incomplete summaries

110

1 issues have been resolved.  
2 "The counter problem which caused the first issue  
3 has been corrected by inserting a message into the  
4 messagestore, for equal but opposite values/quantities,  
5 as agreed with POL (OCP ...)"  
6 So we see there that the OCP was approved, yes?  
7 A. Yes.  
8 Q. "As a result of this corrective action, the net effect  
9 on POLFS is zero, and POLFS figures are in line with the  
10 branch."  
11 Do you see that?  
12 A. Yes.  
13 Q. Which reflects the general principle that Fujitsu were  
14 concerned to ensure that there aren't discrepancies  
15 between the TPS system and the branch's own accounting  
16 position, yes?  
17 A. Yes.  
18 Q. "POLMIS ..."  
19 That's Post Office Management Information System.  
20 "... received both the original message and the  
21 corrective message."  
22 "Once the problem was corrected, there should have  
23 been no impact on the branch."  
24 Do you see that?  
25 A. Yes.

111

1 Q. And you understand why, don't you?  
2 A. Yes.  
3 Q. It is correct, isn't it, that where you have  
4 a transaction that involves no settlement value then  
5 once that is cancelled out the branch will properly  
6 balance?  
7 A. Yes.  
8 Q. "However it has been noted that the stock unit BDC had a  
9 loss of \$1000, which was generated after the correction  
10 was made. We have already notified Gary Blackburn at  
11 POL ... This appears to be a genuine loss at the branch,  
12 not a consequence of the problem or correction."  
13 Would I be right in thinking that you question that  
14 and that you are suggesting that in fact the \$1,000 loss  
15 was caused by the OCP, the transaction insertion?  
16 A. Yes.  
17 Q. And why do you say that?  
18 A. Because I believe that the transaction insertion was  
19 done incorrectly. I think the message that was inserted  
20 did not reflect the right amount.  
21 Q. Is this -- we will come to it in a minute, but there is  
22 a document referring to 2,080. Is that the document you  
23 are referring to?  
24 A. I think that is the document.  
25 Q. You think that that document indicates that a change of

112

1 2,080 was made rather than the \$1,000 or £484 change  
 2 that should have been made?  
 3 A. Yes.  
 4 Q. And that that would have caused the \$1,000 loss, yes?  
 5 A. Yes.  
 6 Q. Now would you accept, stopping there, that the process  
 7 that we have just seen of Fujitsu changing -- inserting  
 8 a settlement line -- inserting a transaction to cancel  
 9 out this unbalanced transaction, that is a relatively  
 10 rare occurrence?  
 11 A. Yes.  
 12 Q. It is not something which we see very much at all in the  
 13 PEAKs which we have all seen, correct?  
 14 A. That is correct.  
 15 Q. We see at the bottom of page 3, this is by Anne Chambers  
 16 who you have heard of before, she says:  
 17 "A single SC line was written for \$1,000 (£484) with  
 18 no settlement, in the middle of two RISP transactions."  
 19 The line was missing some AdditionalData so it  
 20 wasn't harvested properly, but the main problem was the  
 21 lack of settlement. POL authorised us to insert an  
 22 equal but opposite message, to prevent a discrepancy (in  
 23 theory anyway) and to avoid problems on POLFS. Please  
 24 note that this is exceptional and must not be seen as  
 25 a convenient avoidance in place of a fix."

113

1 You would accept, would you, that what she says  
 2 there, which is that this is exceptional, don't expect  
 3 us always to be dealing with points of this sort, that's  
 4 fairly reflected in the PEAKs that you have seen, isn't  
 5 it? This is something that happens quite rarely?  
 6 A. Yes.  
 7 Q. You will see Ms Chambers says here that what was  
 8 inserted as a result of the OCP was an equal but  
 9 opposite message?  
 10 A. Yes.  
 11 Q. But you are suggesting that she is wrong about that and  
 12 in fact a larger amount was inserted, is that right?  
 13 A. Yes. Could I just ask, can we just go through this and  
 14 have a look at whether we see the message insert command  
 15 in this PEAK, please.  
 16 Q. I don't believe we do, but we do have the OCP and the  
 17 OCR.  
 18 A. If that is the case, that highlights one of the  
 19 difficulties that you have with identifying from a PEAK  
 20 when a message has been inserted.  
 21 Q. That's why we have OCPs and OCRs, isn't it, so you can  
 22 see -- the purpose of those documents is to record  
 23 precisely that information, would you agree?  
 24 A. The purpose of those documents is to request permission  
 25 from Post Office to do something, but that in itself may

114

1 not contain any search terms that would indicate that  
 2 a message has been inserted. There is no --  
 3 Q. In any event, it is the case, isn't it, that there are  
 4 OCPs and OCRs in this case which cause you to conclude  
 5 that there was an error made in the level of the  
 6 transaction insertion into the branch accounts, correct?  
 7 A. Yes.  
 8 Q. So let's look at that. First of all, let's look at the  
 9 OCP. That is at {F/432.2/1}. You will see what it says  
 10 here:  
 11 "A single SC message ... was written in error on  
 12 26th November ... selling 1,000 US dollars, with no  
 13 corresponding settlement line. To remove the effects of  
 14 this message at both the branch and on POLFS, we will  
 15 insert a new message to negate the effects of the  
 16 original message."  
 17 "Justification: If the change is not made in the  
 18 counter messagstore (before the stock unit is balanced  
 19 on Wednesday), the branch will have an unexpected gain  
 20 of £484 (or thereabouts - depends on exchange rate), and  
 21 a receipts and payments mismatch. This gain would have  
 22 to be resolved at the branch. There would also be an  
 23 inconsistency between the branch and POLFS to be  
 24 resolved. By correcting the problem locally, the branch  
 25 may not be aware of the problem, and there will be no

115

1 inconsistency between the branch and POLFS."  
 2 Do you see that?  
 3 A. Yes.  
 4 Q. And all those things are true, yes? If the right figure  
 5 is entered in, the branch will balance. There will be  
 6 no danger to the branch's balancing. The concern is if  
 7 the wrong figure is inserted, correct?  
 8 A. Yes.  
 9 Q. Then:  
 10 "Extra detail: The original message ..."  
 11 And this is the information I think you were  
 12 referring to in your answer previously?  
 13 A. Yes.  
 14 Q. "The original message had ProductNo:5129, Qty:1,  
 15 SaleValue:484, PQty:1000. The new message will have ..."  
 16 Then there are some similar words but basically the  
 17 opposite of what's in there.  
 18 "... with other attributes as before."  
 19 Do you see that?  
 20 A. Yes.  
 21 Q. So you can see precisely what was going to be done with  
 22 this transaction insertion, yes?  
 23 A. Yes. This isn't the message, this is just describing  
 24 here what information they are going to put in the  
 25 message when they create it.

116

1 Q. And what you are suggesting is that although that was  
2 the intention, in fact the people that did it got it  
3 wrong, yes?  
4 A. Yes.  
5 Q. And you do that on the basis of another document that we  
6 will go to in a minute.  
7 Then it says:  
8 "The message will include a comment to show it has  
9 been inserted to resolve this problem (this will not be  
10 visible to the branch)."  
11 So you will see this is consistent with Mr Parker's  
12 evidence that when insertions are made, comments are  
13 included so that it can be seen. In this case not by  
14 the postmaster but it can be seen, so if anyone looks at  
15 what has happened in the branch they will see there has  
16 been an insertion by the SSC, do you see that?  
17 A. If anyone back at Fujitsu looks at it they will know.  
18 The postmaster wouldn't know though.  
19 Q. Then it says:  
20 "This change will first be applied to a copy of the  
21 messagestore within the SSC environment, and the stock  
22 unit then rolled over to make sure there are no  
23 unexpected consequences. Neither the new nor the old  
24 message will be included in the data sent to POLF."  
25 This indicates that they were effectively going to

117

1 test the change before they actually made it, yes?  
2 A. Yes.  
3 Q. So it would be quite surprising, wouldn't it, if they  
4 did a dummy run on a copy of the messagestore held by  
5 the SSC, got a positive result, but then when they did  
6 it in live action they actually produced the wrong  
7 result. That would be quite a surprising mistake to  
8 make, I think you would agree?  
9 A. I'm not sure that the test they conducted would have the  
10 ability to see that level of sophistication because  
11 I think what they are going to test here is that the  
12 message can be successfully inserted. They only have  
13 a copy of the messagestore that they have taken and that  
14 will be probably at maximum 24 hours of transactions.  
15 Q. Are you sure that's fair, Mr Coyne, because they do say:  
16 "... and the stock unit then rolled over to make  
17 sure there are no unexpected consequences."  
18 So what they are going to do is make the insertion  
19 in the dummy account, they are then going to roll the  
20 dummy account over and see what the consequences are.  
21 Wouldn't it be fair to assume that -- aren't they  
22 precisely saying that in those circumstances they are  
23 going to type in what they intend to do, make sure that  
24 it has the intended effect and allows a roll-over with  
25 a proper balance, and then once they have satisfied

118

1 themselves that that is right they will then do it in  
2 live use, yes?  
3 A. It could be, yes.  
4 Q. Are you suggesting they mean something else?  
5 A. There isn't a great deal of detail there. I don't know  
6 what the set up of the SSC environment is. We don't  
7 know how much of the messagestore is in there.  
8 Q. So you are saying that because you are seeking to resist  
9 the impression that you perceive I'm trying to give,  
10 that the notion that the transaction insertion involved  
11 an error is quite surprising, and you don't want to  
12 accept that and the way you respond to that is by saying  
13 you don't know precisely what they did, is that right?  
14 A. I do not think either of us now know precisely what that  
15 test did.  
16 Q. I would like to suggest to you, Mr Coyne, that it is  
17 painfully obvious what the test did. They applied the  
18 change they were going to apply on a test rig which had  
19 an identical copy of the messagestore of the branch,  
20 they rolled it forward, and then they saw what the  
21 consequences were. What else could that sentence be  
22 talking about?  
23 A. And would that test environment then have a look at the  
24 impact on what the branch accounts would be?  
25 Q. Yes.

119

1 A. Or are they just looking at whether a roll-over can take  
2 place or not?  
3 Q. Very well. Let's go on to the OCR, because it is the  
4 OCR which is the basis of your suggestion that in fact  
5 they inserted the wrong figure, yes?  
6 A. Mm.  
7 Q. It is at page {F/434.1/1}:  
8 "Extra detail: This OCR is being raised so that EDSC  
9 ..."  
10 Do you know what EDSC is?  
11 A. I don't. It may appear in the glossary.  
12 Q. You see it in a lot of PEAKs, don't you?  
13 "... is authorised to amend the transaction details  
14 for [that branch] and insert these into  
15 \_pol\_fs\_summaries\_incomp table on the host."  
16 You see what's being described here. The consent  
17 that is being sought here is for an insertion into  
18 a POLFS table in the TPS?  
19 A. Yes.  
20 Q. "Comments:  
21 "Andy Keil ... wrote at 12/12/2007 ... Updated POLFS  
22 feed for branch 183227 product 5129 mode SC with  
23 SaleValue=1014.73 and PQty=2080."  
24 Do you see that?  
25 A. Mm.

120

1 Q. And what you are suggesting is that that insertion would  
2 have caused an imbalance, would have caused -- could  
3 have caused a loss in the branch?  
4 A. Yes.  
5 Q. If we go down to "Other details ", you see the last entry  
6 on "Other details "? It says:  
7 "Change type: TRT."  
8 What does that mean?  
9 A. TIP repair tool?  
10 Q. Yes. So what they are talking about here, what this  
11 change here is, is a change being made by using the TIP  
12 repair tool into the TPS, correct?  
13 A. Right, so this doesn't relate to the creation of the  
14 message then.  
15 Q. It doesn't relate to the branch accounts, Mr Coyne, does  
16 it? This is an OCR which involves an exercise -- well,  
17 the use of the TIP repair tool to change data that is in  
18 the TPS system, yes?  
19 A. Yes, but the PEAK refers to the insertion of a message  
20 into the messagestore.  
21 Q. Yes, the PEAK and indeed the OCP we have just looked at.  
22 It is the OCP which deals with the transaction insertion  
23 into the messagestore. The OCR isn't concerned with the  
24 transaction insertion into the messagestore, is it? The  
25 OCR is concerned with a change made via the TIP repair

121

1 tool of the data that's held in the TPS, correct?  
2 A. Right, yes.  
3 Q. So it follows as night follows day that whatever change  
4 was made as a result of this tool, it didn't affect any  
5 change to the branch accounts, it didn't constitute  
6 an insertion into the messagestore for the branch, do  
7 you agree?  
8 A. So if I follow correctly, what you are putting to me  
9 here is that what we see within this OCR is a secondary  
10 form of correction via the TIP repair tool?  
11 Q. Yes.  
12 A. After the message that was inserted into the  
13 messagestore?  
14 Q. It doesn't matter whether it was after or before. What  
15 matters is that this document and the transaction, the  
16 work that it covers, is nothing to do with the  
17 messagestore of the branch and I would like you to  
18 accept that.  
19 A. Whilst it might be nothing to do with it, it is making  
20 an alteration to the branch accounts.  
21 Q. Mr Coyne, I have spent something like 45 minutes this  
22 morning seeking very carefully to get you to agree, and  
23 to be fair to you, you did agree, that when a change is  
24 made using the TIP repair tool it doesn't change the  
25 branch accounts, it doesn't affect the messagestore of

122

1 any branch, it only affects the data within the TPS  
2 system.  
3 A. Yes.  
4 Q. If you want to make a change to the accounts you have to  
5 insert a transaction?  
6 A. Yes.  
7 Q. Using the facility in Legacy Horizon?  
8 A. Yes.  
9 Q. That facility is approved pursuant to the OCP we saw  
10 before we looked at this document. However, there were  
11 two problems. There was a problem with the  
12 messagestore.  
13 A. Yes.  
14 Q. And there was also a separate problem with the POLFS  
15 data, the data that was in the TPS system.  
16 A. Yes.  
17 Q. This OCR is concerned with getting authorisation to make  
18 the change to what's in the --  
19 A. TPS system, and the PEAK was to do with making  
20 the change.  
21 Q. The PEAK covered both problems. You will recall that  
22 there are two changes referred to. There are OCRs  
23 referred to in the PEAK and there is an OCP referred to  
24 in the PEAK.  
25 A. Yes.

123

1 Q. And I have taken you to the OCP first of all and now we  
2 are looking at an OCR.  
3 A. Right. Could I please have a look at the time within  
4 the PEAK that the observation about the \$1,000 was made?  
5 Q. Yes, by all means.  
6 MR JUSTICE FRASER: That's exactly what I'm doing actually.  
7 MR DE GARR ROBINSON: It is F/432 --  
8 MR JUSTICE FRASER: There is page 1 and 2, I think. The  
9 PEAK is {F/432/1}.  
10 MR DE GARR ROBINSON: The reference to the \$1,000 loss  
11 though is on page {F/432/3} about four boxes down,  
12 14 December at 16.13.  
13 MR JUSTICE FRASER: I think the OCR that you have just been  
14 putting, Mr de Garr Robinson, is one of the ones  
15 mentioned on page 2, is that right?  
16 MR DE GARR ROBINSON: Yes, my Lord, I believe so.  
17 MR JUSTICE FRASER: Because actually it says on  
18 12th December 2007 at 16.39:  
19 "User: Andy Kiel. Details of how POLFS feed was  
20 corrected 12.12.2007."  
21 Is that the one?  
22 MR DE GARR ROBINSON: My Lord, yes.  
23 MR JUSTICE FRASER: Which appears on the line before. It is  
24 also on page 432/2 in the entry immediately before.  
25 MR DE GARR ROBINSON: Absolutely. Sorry?

124

1 MR JUSTICE FRASER: For some reason on my screen the two  
 2 entries are highlighted in blue, I thought it was  
 3 a hyperlink. It is the antepenultimate entry on page 2  
 4 and the one before it, isn't it? Aren't they the exact  
 5 documents you have been using?  
 6 MR DE GARR ROBINSON: At 12th December 2007 at 15.06 there  
 7 is a reference to the OCR.  
 8 MR JUSTICE FRASER: Yes, and then underneath --  
 9 MR DE GARR ROBINSON: Details of how the feed was corrected.  
 10 MR JUSTICE FRASER: Yes, and that's what you have been  
 11 putting.  
 12 MR DE GARR ROBINSON: Yes.  
 13 Does that help you, Mr Coyne?  
 14 A. Because we know that the TPS side of the fix to this  
 15 problem happened on 12th December at 15.07. The  
 16 observation about the £1,000 was on 14th December.  
 17 MR DE GARR ROBINSON: Yes, when the roll-over was done or  
 18 after the roll over was done.  
 19 A. So the bit that's missing is we need to see the message,  
 20 so that is the OCP. Can we see the time --  
 21 Q. Mr Coyne, when I asked you about this before you said  
 22 there was a reason why you thought there was an error  
 23 made in the transaction insertion and that's because  
 24 there was a document which showed the figure of 2,080  
 25 being inserted yes?

125

1 A. Yes.  
 2 Q. And that figure is on page {F/434.1/1}, it is in the  
 3 OCR.  
 4 A. Yes.  
 5 Q. I can tell you on instructions what that figure means.  
 6 If we go under "Comments":  
 7 "Updated POLFS feed for branch [blah, blah, blah]  
 8 with SaleValue=1014.73 and PQty=2080."  
 9 You will recall that the transaction itself was  
 10 removed from POLFS. The \$1,000 transaction, the £484,  
 11 it was removed from POLFS. You remember seeing that in  
 12 the PEAK?  
 13 A. Yes.  
 14 Q. But what's left is the aggregate of all the remaining  
 15 dollar conversion transactions which have been  
 16 undertaken in the relevant period.  
 17 A. Yes.  
 18 Q. So on instructions I can tell you that the sale value of  
 19 1,014.73 and the quantity of 2,080, those figures relate  
 20 to what is the aggregate of the figures that are left in  
 21 the system after you remove the one-sided transaction  
 22 that the parties were concerned about.  
 23 A. Right.  
 24 Q. It would be difficult to understand them otherwise,  
 25 because 1,014.73 bears no relation to £484 or to \$1,000,

126

1 does it?  
 2 A. No, I agree with that.  
 3 Q. I appreciate that I'm telling you this on instructions  
 4 because I have to say nobody knew that this suggestion  
 5 was going to be made until it was put to Mr Godeseth  
 6 when he was being cross-examined, but in actual fact it  
 7 follows as a matter of logic, doesn't it, that whatever  
 8 the explanation of these figures -- sale value 1,014 and  
 9 quantity 2,080 -- whatever the nature of those figures,  
 10 those figures actually have no impact on the  
 11 messagestore on the branch accounts that could have  
 12 caused a \$1,000 loss?  
 13 A. Well, the \$1,000 loss would be because of a difference  
 14 between the two, and you are making change to the branch  
 15 within the messagestore and you are making a change to  
 16 the backing systems to the TPS.  
 17 Q. Let's go back to page {F/432/3}, please. This is  
 18 Anne Chambers explaining what has happened. She has all  
 19 the documents and she has sight of what's going on in  
 20 the messagestore, yes?  
 21 A. Yes.  
 22 Q. She says in the third paragraph -- the second paragraph:  
 23 "The counter problem which caused the first issue  
 24 has been corrected by inserting a message into the  
 25 messagestore, for equal but opposite values/quantities,

127

1 as agreed with POL ..."  
 2 A. Yes.  
 3 Q. She has seen the transaction that is done and it is her  
 4 view that what was inserted was an equal but opposite  
 5 value, yes?  
 6 A. Yes.  
 7 Q. And she then goes on:  
 8 "As a result of this corrective action, the net  
 9 effect on POLFS is zero, and POLFS figures are in line  
 10 with the branch. POLMIS received both the original  
 11 message and the corrective message."  
 12 Do you see that?  
 13 A. Yes.  
 14 Q. "Once the problem was corrected, there should have been  
 15 no impact on the branch. However it has been noted that  
 16 the stock unit BDC had a loss of \$1000, which was  
 17 generated after the correction was made."  
 18 A. So between the 12th at midday but before 14th when this  
 19 is recorded.  
 20 Q. The OCP was made -- the OCP was raised on 10th December,  
 21 you see that at the top of page {F/432/2}, and the  
 22 correction was made to the messagestore on 11th  
 23 December. That's on page 2, six boxes down. Do you see  
 24 that?  
 25 A. One of the documents said 12th December at 15.07, either

128

1 the OCP or the OCR.  
 2 Q. 12th December, 15.07?  
 3 A. Yes, at the time of 15.07, I believe.  
 4 MR JUSTICE FRASER: That is the OCR which is on --  
 5 MR DE GARR ROBINSON: Yes, that is the TPS. What happens is  
 6 there is an OCP that is done, that's actioned on  
 7 11 December, so the messagestore is changed on  
 8 11 December.  
 9 A. Yes.  
 10 Q. Then there is an OCR which changes the TPS on  
 11 12th December.  
 12 A. Yes.  
 13 Q. And then on 14 December Anne Chambers is reviewing  
 14 everything that has happened and she said the  
 15 transaction insertion goes through fine, but after it's  
 16 gone through a \$1,000 loss has appeared on a particular  
 17 stock unit.  
 18 Now you latched onto the OCR with a view to  
 19 suggesting that because the figure of 2,080 was used  
 20 rather than 1,000, and because the figure of 1,014 was  
 21 used rather than 484, you latched onto that and thought,  
 22 aha, there must have been an error in this insertion and  
 23 that error must have been responsible for the loss.  
 24 What I'm suggesting to you, Mr Coyne, is that's not  
 25 right, because this is a change that was not made to the

129

1 messagestore, it was made to the TPS system, do you  
 2 agree?  
 3 A. There were two changes, one to the messagestore and one  
 4 to the TPS system.  
 5 MR JUSTICE FRASER: I think that's agreed.  
 6 MR DE GARR ROBINSON: I will move on.  
 7 MR JUSTICE FRASER: Just before you do, I appreciate you  
 8 have been putting these points on instruction, as you  
 9 put it. I would really quite like to understand the  
 10 chronology in detail, I'm pretty sure I do, but I'm just  
 11 going to tell you what my understanding is because it is  
 12 taken from the PEAK.  
 13 MR DE GARR ROBINSON: My Lord, yes.  
 14 MR JUSTICE FRASER: And it is simply so that you can tell me  
 15 if I haven't got it right.  
 16 The PEAK is raised, and I find page 2 of the PEAK  
 17 most useful because it actually says when the OCPs are  
 18 created and when the OCRs are created.  
 19 MR DE GARR ROBINSON: Yes.  
 20 MR JUSTICE FRASER: The OCR is created on 10th December 2007  
 21 at 17.25, is that right?  
 22 MR DE GARR ROBINSON: The OCP, my Lord, yes.  
 23 MR JUSTICE FRASER: I beg your pardon.  
 24 MR DE GARR ROBINSON: That is the transaction insertion into  
 25 the messagestore.

130

1 MR JUSTICE FRASER: On 10th December 2007 at 17.25.  
 2 MR DE GARR ROBINSON: Yes.  
 3 MR JUSTICE FRASER: It actually says "OCR" on here.  
 4 MR DE GARR ROBINSON: Your Lordship is absolutely right.  
 5 MR JUSTICE FRASER: I was about to come onto the OCP which  
 6 I think is 40-odd seconds later.  
 7 MR DE GARR ROBINSON: Your Lordship is absolutely right.  
 8 I'm sorry to have spoken too soon.  
 9 MR JUSTICE FRASER: No, it is just important for me to  
 10 understand it. So there is an OCR at 17.25 which is  
 11 referenced here on 10th December, and there is also  
 12 an OCP literally about a minute later. Am I reading it  
 13 correctly?  
 14 MR DE GARR ROBINSON: Yes.  
 15 MR JUSTICE FRASER: Then we come further down the document  
 16 and there is a reference on 12th December, both at 15.06  
 17 to the actual OCR and then at 16.39 to details of how it  
 18 was corrected, and those two entries should effectively  
 19 be read together, is that correct?  
 20 MR DE GARR ROBINSON: My Lord, I believe so. So the OCR was  
 21 given effect to on the 12th.  
 22 MR JUSTICE FRASER: So as at the 12th, whatever is being  
 23 done to the system has in fact been done, is that right?  
 24 MR DE GARR ROBINSON: My Lord, I believe so, yes.  
 25 MR JUSTICE FRASER: Then the review where Ms Chambers says

131

1 what she does on 14 December, 16.13, is after those  
 2 changes, is that right?  
 3 MR DE GARR ROBINSON: My Lord, yes.  
 4 MR JUSTICE FRASER: That's all I need to do. I just wanted  
 5 to confirm that because I obviously can't go to  
 6 a witness statement to look at it. Back to you.  
 7 MR DE GARR ROBINSON: So I've spent 40 minutes on this one  
 8 document and I rather think I need to get on.  
 9 If we could go back to the joint statement, please.  
 10 That's {D1/5/4}.  
 11 A. Sorry, what page number, please?  
 12 Q. I'm sorry?  
 13 A. What page number?  
 14 Q. Page 4.  
 15 A. Yes, I have that.  
 16 Q. It is the third bullet point in paragraph 10.2.  
 17 A. Yes.  
 18 Q. There is the third form of remote access which is  
 19 deletion of messagestore data?  
 20 A. Yes.  
 21 Q. We know that wholesale deletion of the messagestore was  
 22 possible as part and parcel of the automatic back up  
 23 process that we talked about and of course that involves  
 24 no discretionary manual deletions. Could I ask you,  
 25 what examples have you found of discretionary manual

132

1 deletions of transactions in the messagestore?  
 2 Individual transactions?  
 3 A. No, it is typically wholesale.  
 4 Q. Thank you. So you are not aware of there being any  
 5 example of a discretionary deletion of a particular line  
 6 of transaction data in Legacy Horizon, are you?  
 7 A. No. The typical way of dealing with it will be  
 8 an insertion of a balancing --  
 9 Q. Thank you. Nor are you aware, are you -- I have gone  
 10 through your reports quite carefully and if I have  
 11 missed it, it is my fault -- of any edits in  
 12 Legacy Horizon of any lines of transaction data? No  
 13 example of that has been identified, has it?  
 14 A. Yes, messages are transferred to Fujitsu to enable them  
 15 to edit the message and then reinsert the message.  
 16 Q. So transaction insertions possible?  
 17 A. Yes.  
 18 Q. But if you have got a piece of data, a line of  
 19 transaction data or whatever in the messagestore, you  
 20 are not aware of any example of remote access whereby  
 21 someone gets into the messagestore and edits that line  
 22 of data, are you?  
 23 A. Well, they are editing a line of data, they are bringing  
 24 the messagestore back to Fujitsu, editing the line of  
 25 data and then sending it back.

133

1 Q. Mr Coyne, I understand that the practical effect of  
 2 inserting a transaction could be -- is a change in the  
 3 entirety of the contents of the messagestore, so in  
 4 a loose sense you could say the messagestore as a whole  
 5 has been edited. But I would like to be really clear.  
 6 I'm just asking you the narrow question: have you seen  
 7 any example of someone at Fujitsu, or indeed anyone  
 8 else, accessing a branch's messagestore remotely, so  
 9 from their office, and fiddling about with a transaction  
 10 that's currently in the branch accounts, in the  
 11 messagestore, so as to change its value or change any  
 12 other of its basic transaction details?  
 13 A. I have not seen evidence of changing of value but I have  
 14 seen evidence of editing other data around it.  
 15 Q. I'm being really clear now because I tried to establish  
 16 some clear ground rules when we were talking about what  
 17 constituted transaction data and what constituted  
 18 accounting data. Are you aware of any example of some  
 19 transaction data having been changed, having been edited  
 20 remotely by someone at Fujitsu?  
 21 A. Yes, if we --  
 22 Q. In Legacy Horizon?  
 23 A. If we go to {F/337.1/1}.  
 24 Q. Would you like to talk me through this PEAK?  
 25 A. Is this 337.1?

134

1 MR JUSTICE FRASER: No, this is 337/1. You want  
 2 {F/337.1/1)?  
 3 A. Yes, my Lord.  
 4 MR JUSTICE FRASER: Can we go to that, please.  
 5 MR DE GARR ROBINSON: My Lord, I do not believe there is  
 6 a 337.1.  
 7 MR JUSTICE FRASER: That is the answer to that then. There  
 8 is no 337.1.  
 9 MR DE GARR ROBINSON: Let's move on then --  
 10 A. Can I give you the PEAK number? I have got the PEAK  
 11 number. It is PC0142763.  
 12 Q. That's {F/377.1/1}. This is not a PEAK I have seen. Is  
 13 it referred to in any of your reports?  
 14 A. I'm not sure. I would have to do a search on that and  
 15 see. There are many that are referred to in my report.  
 16 Q. I'm rather wondering, Mr Coyne, whether you came armed  
 17 with this document having found it after you provided  
 18 both your reports but without warning anyone in advance  
 19 that that's what you were doing. It does seem curious  
 20 that you have committed this particular PEAK to memory?  
 21 A. No. My Lord set some homework for me and I started it  
 22 at lunchtime and that is the first one that I have done  
 23 and it relates to this particular --  
 24 MR JUSTICE FRASER: I do not think I set you that homework.  
 25 A. Sorry.

135

1 MR DE GARR ROBINSON: This isn't referred to in any of your  
 2 reports, so it is a voyage of discovery for me. Would  
 3 you like to talk me through this PEAK? It is rather  
 4 difficult, but if you could do it without taking too  
 5 much time I would be grateful.  
 6 A. Yes, okay. If we go straight to the end, because that  
 7 shows the editing process {F/377.1/6}, this is where we  
 8 have got the message being edited. So it looks like it  
 9 was -- I think the ID is the counter ID and it has been  
 10 changed from 1 to 11 and from 2 to 12. And then I think  
 11 the fourth line down you see the transaction.  
 12 MR DE GARR ROBINSON: Mr Coyne, I have never seen this  
 13 document before but I venture to suggest that this is  
 14 an example of a transaction insertion, yes?  
 15 A. They are inserting a transaction, yes.  
 16 Q. So this is an example of a case where the SSC,  
 17 I presume, has a transaction that it wishes to insert  
 18 into the messagestore which everyone agrees that SSC has  
 19 the power to do?  
 20 A. Yes.  
 21 Q. My question was different. My question was are you  
 22 aware of a single example of someone at the SSC sitting  
 23 at a screen in his office in a secure area where the SSC  
 24 operated, gaining access to someone's messagestore, some  
 25 branch's messagestore, looking at a transaction that is

136

1 in the messagestore, and then by using his machine  
 2 editing the transaction that's on the messagestore?  
 3 That was my question.  
 4 A. No, because that isn't the process that's done. The  
 5 process is that the messagestore is transferred back to  
 6 SSC, the edit is made, and then it is transferred back.  
 7 Q. So the answer to my question, which was very carefully  
 8 formulated, is that you are not aware of any occasion  
 9 when a transaction has been edited by a form of remote  
 10 access. You are only aware of occasions when  
 11 transactions of one sort or another have been inserted,  
 12 is that right?  
 13 A. This has been inserted but it is a message that was  
 14 already in the messagestore that has been brought back,  
 15 edited, and pushed back again.  
 16 Q. Mr Coyne, I'm just trying to be really clear about  
 17 concepts. The Horizon Issues talk about insertions or  
 18 injections of transaction data, it talks about deletion  
 19 of transaction data, and it talks about editing of  
 20 transaction data. You very kindly admitted that you are  
 21 not aware of any case where there has been a remote  
 22 deletion of transaction data.  
 23 A. Right.  
 24 Q. And I was suggesting to you that nor were you aware of  
 25 any case where there has been an example of remote

137

1 editing of transaction data. That means that the only  
 2 form of remote access that's left in Legacy Horizon is  
 3 transaction insertions.  
 4 Now, what you have just brought me to, and we have  
 5 taken 10 minutes on it, is an example of a transaction  
 6 insertion, yes?  
 7 A. It is an insertion but it is insertion of a transaction  
 8 that was already there. So effectively it is  
 9 a modification. It is not a new transaction.  
 10 Q. Let's move on. I'm getting anxious -- I'm already very  
 11 anxious about time.  
 12 That deals with the facilities for remote access in  
 13 Legacy Horizon, doesn't it?  
 14 A. Yes.  
 15 Q. So let's look at Horizon Online now and let's do it as  
 16 quickly as we can. If we go back to page {D1/5/4}, and  
 17 I hope I can take this quickly. We have dealt with the  
 18 three Legacy Horizon entries at the top of  
 19 paragraph 10.2, yes?  
 20 A. Yes.  
 21 Q. Then there is a Horizon Online form of remote access:  
 22 "Injection of a transaction --"  
 23 Let's leave that one out.  
 24 "In Horizon Online, using the balancing transaction  
 25 tool ... as defined below."

138

1 A. Yes.  
 2 Q. Now, the balancing -- we call it the balancing  
 3 transaction tool, just inserts transactions, yes?  
 4 A. Yes.  
 5 Q. Into particular tables in the BRDB where transaction  
 6 data is held, yes?  
 7 A. Yes.  
 8 Q. I hope I can take this relatively quickly. It is agreed  
 9 that that tool writes to a particular audit log, yes?  
 10 If we go to page {D1/5/14} of this very document.  
 11 A. It writes to a journal file, yes.  
 12 Q. If we look at paragraph 12.3, it is agreed that that  
 13 tool writes to this journal, yes?  
 14 A. Yes.  
 15 Q. The audit log for that journal has been disclosed,  
 16 correct?  
 17 A. I think the journal itself has been disclosed.  
 18 Q. That's what I meant. The journal is the audit log,  
 19 correct?  
 20 A. I don't know if anyone audited it or not, but it is  
 21 a record of use. That is the journal of use.  
 22 Q. Yes, its purpose is to stand as an audit log so you can  
 23 go and see what uses have been made of the relevant  
 24 tools?  
 25 A. That's its purpose, yes.

139

1 Q. Would I be right in thinking you agree there's only been  
 2 one use of the transaction correction tool to insert  
 3 transactions into the BRDB, is that correct?  
 4 A. Using that tool, yes.  
 5 Q. If we can now move on. I would like to ask you  
 6 a question about your second report, it is at  
 7 {D2/4.1/72}. It is paragraph 3.223. Here you refer to  
 8 a PEAK which is at {F/594/1}, which I hope we won't need  
 9 to go to in light of what you have already said. You  
 10 say: it:  
 11 "... suggests that the modifications by Fujitsu  
 12 support staff to the Horizon Branch Database (BRDB) is  
 13 not unusual."  
 14 I think we can agree that that PEAK, which is at  
 15 {F/594/1}, I'm not suggesting we go to it, is a PEAK  
 16 which discusses whether immediately after the one use of  
 17 the transaction correction tool that we are aware of --  
 18 perhaps let me put it to you this way. Does it ring  
 19 a bell that the one use that we are aware of was given  
 20 effect to, happened on 11 March 2010, very early on in  
 21 the life of Horizon Online, does that ring a bell?  
 22 A. Yes.  
 23 Q. And this PEAK is opened the day after it on 12th March,  
 24 yes?  
 25 A. Yes.

140

1 Q. And it is opened by the person that made the balancing  
 2 transaction in the first PEAK?  
 3 A. Right, yes.  
 4 Q. Do you remember that?  
 5 A. Yes.  
 6 Q. And what happens is that person says "We have now used  
 7 the tool and I can think of some ways in which we can  
 8 improve it"?  
 9 A. Yes.  
 10 Q. Then there is a debate during the course of the PEAK as  
 11 to how it could be improved. No sense of urgency, the  
 12 PEAK goes on for quite a long time, do you remember  
 13 that?  
 14 A. Yes.  
 15 Q. Eventually it is agreed that certain changes will be  
 16 made, and ultimately after a long time those changes are  
 17 made to the transaction correction tool. Do you recall  
 18 that?  
 19 A. Yes. They talk about typically trying to create  
 20 templates, so that when people use it in the future they  
 21 fill in a template to make the tool easier to use and to  
 22 ensure there are less risk problems when using it.  
 23 Q. You say in paragraph 3.223 that this PEAK:  
 24 "... suggests that the modifications by Fujitsu  
 25 support staff to the Horizon Branch Database ... is not

141

1 unusual."  
 2 What you are suggesting is having regard to the  
 3 PEAK, you think the transaction correction tool to  
 4 insert transactions is not unusual, it happens more  
 5 often than once. That's what you are inferring from the  
 6 PEAK, correct?  
 7 A. No, from what the PEAK says, the process of doing it  
 8 does not seem unusual or unfamiliar to people.  
 9 Q. Yes. I have a series of questions to ask you about that  
 10 by reference to the PEAK.  
 11 A. Yes.  
 12 Q. But I can shortcircuit all of those questions by  
 13 indicating that in actual fact you accept that the  
 14 transaction correction tool was only used once to insert  
 15 transactions into branch accounts, yes?  
 16 A. Yes. There are other tools that are written to the same  
 17 journal, but only one of those journal entries show this  
 18 particular tool being used to edit the BRDB with regard  
 19 to transactions.  
 20 Q. Just to be clear, here you are suggesting the use of the  
 21 tool is not unusual, you're suggesting there's a  
 22 significant number of uses of the tool, and I'm really  
 23 not suggesting any criticism of you, Mr Coyne, at all,  
 24 but just to be clear for his Lordship's note, actually  
 25 you accept it only happened once, correct?

142

1 A. I accept that this tool was only used once to insert a  
 2 balancing transaction.  
 3 MR JUSTICE FRASER: That's three times I have now got that.  
 4 MR DE GARR ROBINSON: I'm grateful, my Lord.  
 5 MR JUSTICE FRASER: I generally have them first time but  
 6 three times -- I can understand why you put it again,  
 7 but I'm just saying I do have it.  
 8 MR DE GARR ROBINSON: Thank you for the clarity, my Lord.  
 9 Then if we can go back to {D1/5/4}. These are your  
 10 forms of remote access. At the bottom you say:  
 11 "In both Legacy and Online, usage of the transaction  
 12 repair tool to fix transaction data within the Horizon  
 13 ..."  
 14 We don't need to spend any time on that because you  
 15 agreed that that tool isn't used for the purposes of  
 16 injecting or deleting or editing any data in any branch  
 17 accounts, correct?  
 18 A. There is another use of that tool or the journal and  
 19 that is to remove the recovery flag.  
 20 Q. I'm sorry, Mr Coyne, I think it may have been my fault.  
 21 When you say transaction repair tool, I should probably  
 22 have said TIP repair tool. You are referring to the TIP  
 23 repair tool here, aren't you?  
 24 A. No, the balancing transaction tool. Its use -- it  
 25 appears its use was widened. This was covered in the

143

1 evidence of I think it was Mr Godeseth.  
 2 Q. Mr Coyne, I don't understand. You have dealt with the  
 3 balancing transaction tool in the previous bullet point.  
 4 A. Yes.  
 5 Q. My understanding was that in the next bullet point,  
 6 where you refer to the transaction repair tool, the only  
 7 tool that I'm aware of that has "repair" in its name was  
 8 the TIP repair tool. Were you not referring to the TIP  
 9 repair tool?  
 10 A. Sorry, I was.  
 11 Q. So we can agree, can't we, that in accordance with the  
 12 definition of remote access that I suggested at the  
 13 beginning of this conversation, then that bullet point  
 14 can come out, can't it, yes?  
 15 A. Following your specification of what remote access is,  
 16 yes.  
 17 Q. Thank you. So what we are left with is the bullet point  
 18 above the balancing transaction tool, which is SQL  
 19 injection line editor?  
 20 A. Yes.  
 21 Q. That's by privileged users, yes?  
 22 A. Yes.  
 23 Q. And would it include use of the APPSUP role?  
 24 A. Yes.  
 25 Q. Here's some common ground. Privileged users have strong

144

1 powers to add, delete and edit data, don't they?  
 2 A. Yes.  
 3 Q. You and Dr Worden agree, I think, that the abilities of  
 4 that kind are necessary for the administration of any  
 5 database of this sort?  
 6 A. Yes.  
 7 Q. I imagine you are not aware of any big system which  
 8 doesn't have such facilities, yes?  
 9 A. There needs to be a super user access somewhere, yes.  
 10 Q. So the mere existence of this right of access does not  
 11 indicate that the system is insecure, does it?  
 12 A. It would indicate that it's insecure if that access is  
 13 given to too many people, yes.  
 14 Q. It doesn't necessarily follow from the existence of  
 15 these powers that it was in fact used to alter  
 16 transaction data, necessarily?  
 17 A. That doesn't -- yes.  
 18 Q. So the question is whether and to what extent it  
 19 actually happens and in what circumstances, yes?  
 20 A. Yes.  
 21 Q. Could you explain how an SQL line editor would be used  
 22 in a case of this sort? I mean the BRDB has over 250  
 23 tables, doesn't it? Is it quite a complex process to  
 24 change those tables in a way that doesn't cause problems  
 25 within the system as a whole?

145

1 A. No, I mean the good thing about the SQL command is that  
 2 you can use it to look up information that's in there  
 3 and get it to return a value and then change that value.  
 4 It is quite easy when you use the SQL tool.  
 5 Q. Could I ask you to look, please, in your second report,  
 6 {D2/4.1/83}, at paragraphs 3.266 to 3.276. I'm not  
 7 going to read them out loud, I'm going to deal with them  
 8 as quickly as is humanly possible.  
 9 These paragraphs deal with the use of -- is it the  
 10 use of SQL to delete certain kinds of data?  
 11 A. Yes.  
 12 Q. You refer to a number of PEAKs. Let me see if I can  
 13 take this in stages without having to go to any of them.  
 14 It is inevitable in any network system that you could  
 15 get a network outage, yes?  
 16 A. Yes.  
 17 Q. So systems have countermeasures in place against such  
 18 eventualities?  
 19 A. Yes.  
 20 Q. And one of the systems that Horizon has in place is the  
 21 concept of the recoverable transaction?  
 22 A. Yes.  
 23 Q. And what happens when you are typing a transaction into  
 24 the counter is that recovery data is constantly  
 25 transmitted to the BRDB and stored in various tables in

146

1 case it becomes necessary to use it?  
 2 A. Yes.  
 3 Q. But all that data becomes irrelevant once the  
 4 transaction is entered into the -- once the basket is  
 5 committed to the BRDB --  
 6 A. Yes.  
 7 Q. -- and the transaction enters the account.  
 8 Now, there are a number of states that recovery data  
 9 has, aren't there? There's active, which is the  
 10 recovery data is active and will be returned to the  
 11 counter should failure occur?  
 12 A. Yes.  
 13 Q. And there is completed, that's where the recovery  
 14 process has been completed and the transaction is  
 15 recovered?  
 16 A. Yes.  
 17 Q. There is a third state, which is outstanding, which is  
 18 that the recovery process was unable to recover the  
 19 transaction for some reason and to allow the counter to  
 20 proceed, the recovery data is marked as outstanding and  
 21 needs to be manually resolved by support staff?  
 22 A. Correct.  
 23 Q. Now, the PEAKs that you are talking about here relate to  
 24 transactions involving recovery data which is stuck in  
 25 the outstanding state, don't they?

147

1 A. Yes.  
 2 Q. So the recovery process was unable to recover the  
 3 transaction and the recovery data is therefore marked as  
 4 outstanding and needs to be manually resolved by support  
 5 staff?  
 6 A. Yes.  
 7 Q. The effect of that is that it can prevent the branch  
 8 from rolling over and sometimes it can prevent counters  
 9 from working, I think?  
 10 A. Yes. What should happen is that you reboot the counter.  
 11 The counter sees the recovery flag, looks at the state  
 12 of the data, and hopefully can clear itself up, if you  
 13 will, deciding which transactions to proceed with and  
 14 which to back out of. The problem that occurs sometimes  
 15 is that that process fails and it can't automatically  
 16 recover.  
 17 Q. Yes.  
 18 A. And you end up switching the branch off and back on  
 19 again and it just keeps trying to --  
 20 Q. One of the examples in one of these PEAKs is where the  
 21 clerk was logged on to the counter and then never logged  
 22 off and then the counter was taken away. You remember  
 23 that? Does that ring a bell?  
 24 A. I do, but I don't quite know how it relates to --  
 25 Q. Anyway, in these PEAKs there is discussion of deletion

148

1 of the session to allow the block that's constituted by  
 2 the recovery marker from preventing the branch from  
 3 operating and rolling over, correct?  
 4 A. Yes.  
 5 Q. In those PEAKs, SQL script is used in order to delete  
 6 the session so that it will have that effect, do you  
 7 agree?  
 8 A. Yes.  
 9 Q. So in that process, no data that's actually in the  
 10 branch accounts is affected at all. In each of these  
 11 PEAKs no change is made to any of the transaction data  
 12 or other accounting data that's actually already in the  
 13 branch accounts, correct?  
 14 A. That is where the problem is, that you are deleting  
 15 session data without going through the understanding of  
 16 what position that session data is in.  
 17 Q. And in each of those PEAKs a determination is made that  
 18 the relevant transaction hasn't actually been  
 19 undertaken, it doesn't need to be inserted, doesn't need  
 20 to be included into the branch accounts, and the  
 21 subpostmaster is involved and onside and aware of what's  
 22 going on, do you agree with that?  
 23 A. There isn't a PEAK for every time when that happens.  
 24 Q. Why would there not be a PEAK when it happens? Surely  
 25 there would always be a PEAK when it happens?

149

1 A. The main KEL that covers this scenario is an  
 2 Anne Chambers' KEL and that KEL reference is 3/400  
 3 PEAKs.  
 4 Q. Is it ACHA 959T that you have in mind?  
 5 A. It might well be.  
 6 Q. I believe it may refer to about 2,000 PEAKs, yes?  
 7 A. I do not think it is that high of a number.  
 8 Q. Maybe 1,000.  
 9 A. I think there is a table in the report that goes to  
 10 that, it talks about how many PEAKs are referenced in  
 11 that KEL --  
 12 Q. I think I was probably trying to be a bit clever,  
 13 actually, Mr Coyne, and I think I should apologise for  
 14 being incautious in that endeavour.  
 15 A. I do not think there is a PEAK for every time that  
 16 happens.  
 17 Q. Well, Ms Chambers' KEL, ACHA 959T, is a list of  
 18 instructions about what to do in various different  
 19 scenarios, yes?  
 20 A. Yes.  
 21 Q. It doesn't concern any bugs in Horizon, it is just if  
 22 this happens then this is how it should work, if this  
 23 happens then this, and if there is a problem the SSC  
 24 should do this. That is the nature of the --  
 25 A. Yes, it does result from a bug, error or defect in

150

1 Horizon because the process should be that it recovers  
 2 itself.  
 3 Q. I'm going to suggest to you, but I'm not going to go to  
 4 it, that if you go through that particular KEL you will  
 5 find that it simply addresses various recovery issues  
 6 that can arise in practice?  
 7 A. Yes.  
 8 Q. And suggests how the SSC and other stakeholders in the  
 9 process should deal with them when they do arise?  
 10 A. Yes, it does.  
 11 Q. And my suggestion to you is that it doesn't actually  
 12 consider any bugs in Horizon, it doesn't suggest  
 13 workarounds for bugs in Horizon, that's not the purpose  
 14 of that KEL?  
 15 A. The whole process is a workaround because the system  
 16 isn't designed to do that, so something has failed. So  
 17 it talks about the various workarounds to get the  
 18 counter up and running again.  
 19 Q. Mr Coyne, we will have to agree to differ on that. My  
 20 suggestion to you is that this is just an explanatory  
 21 KEL which explains how the system works. It is actually  
 22 describing how the system should work, it is not  
 23 describing what should happen when the system fails, but  
 24 I can see that we are not going to agree about that.  
 25 A. It is inconsistent that users should be expected to go

151

1 through to Fujitsu third line report to deal with  
 2 a problem that almost should happen. That can't be  
 3 right.  
 4 Q. I think we agreed -- I must go more quickly -- the other  
 5 day that the recovery process, because it involves third  
 6 parties, there is inevitably going to be a situation  
 7 where a manual inquiry needs to be made as to what  
 8 happens on the ground, and then steps need to be taken  
 9 to reconcile what happens on the ground with what's  
 10 recorded in the accounts, and that is inherent in the  
 11 process of having recoverable transactions. Would you  
 12 agree with that?  
 13 A. Yes, but that isn't a manual process. Typically it is  
 14 an automated process which happens thousands of times  
 15 per month across the estate. A few of those, but it is  
 16 in the thousands, the recovery will not be automatic and  
 17 it requires a call to Fujitsu, it goes to third line  
 18 support, the Anne Chambers KEL is considered and that  
 19 process is used, a SQL command is used to delete some of  
 20 the session data, and then the counter is back up and  
 21 running.  
 22 Q. Mr Coyne, I will just leave it here. I was asking you  
 23 about the PEAKs that are referred to in these paragraphs  
 24 under the heading "Deletion of Data" in your report.  
 25 A. Yes.

152

1 Q. And my suggestion to you is that in none of those PEAKs  
 2 was there actually any change made to transaction data  
 3 contained in any branch accounts, would you agree with  
 4 that?  
 5 A. There was no change but there was deletion.  
 6 Q. Not of data in branch accounts. There was deletion of  
 7 data relating to recovery markers which were concerned  
 8 with sessions, would you agree with that?  
 9 A. Yes, but contained within there is session data that's  
 10 in an unconfirmed state that needs dealing with.  
 11 Q. Yes. And in each of those cases it was dealt with in  
 12 consultation with the subpostmaster to ensure that the  
 13 accounts were right, to ensure that nothing was done  
 14 which produced an inappropriate result for the accounts.  
 15 Would you agree with that?  
 16 A. I agree actually with the process, yes.  
 17 MR JUSTICE FRASER: I don't want you to go to it now but can  
 18 you just give me that reference for that KEL that you  
 19 memorised, in due course.  
 20 MR DE GARR ROBINSON: It is ACHA --  
 21 MR JUSTICE FRASER: No, I mean the trial bundle reference.  
 22 Don't spend time now, just mean give it to me whenever.  
 23 And we are going to have to have a short break. Is now  
 24 a good time?  
 25 MR DE GARR ROBINSON: We are, my Lord, and that is a good

153

1 time.  
 2 MR JUSTICE FRASER: We will come back in at 3.20 pm.  
 3 Were you about to give me a reference?  
 4 MR GREEN: {F/1700/1}.  
 5 MR JUSTICE FRASER: Thank you very much.  
 6 3.20 pm.  
 7 (3.13 pm)  
 8 (A short break)  
 9 (3.20 pm)  
 10 MR DE GARR ROBINSON: Mr Coyne, one last PEAK to go to in  
 11 relation to SQL and that's referred to in your report.  
 12 Why don't we have a quick look at your report at  
 13 paragraph 3.275. So it is {D2/4.1/84}.  
 14 A. Yes.  
 15 Q. This is a reference to a PEAK, PC0197592:  
 16 "... details an error whereby rollover cannot be  
 17 completed due to system error. Gareth Jenkins of  
 18 Fujitsu states ..."  
 19 Then you quote what he writes there and you say:  
 20 "This is indicative that Fujitsu, by creating SQL  
 21 scripts, could delete relevant records in order to  
 22 negate previous operations."  
 23 We both agree that privileged user access is a  
 24 powerful thing.  
 25 A. Yes.

154

1 Q. Then you continue:  
 2 "Whilst this is not necessarily deletion of  
 3 transaction data, it is the modification to operations  
 4 that are all intrinsic to transaction accounting."  
 5 I wonder whether we can take this quickly. You  
 6 accept, don't you, that the operation that was  
 7 undertaken here didn't involve deletion of transaction  
 8 data, would you agree with that?  
 9 A. It deleted an opening balance.  
 10 Q. Yes, but it didn't delete transaction data, it deleted  
 11 an opening balance, yes?  
 12 A. I do not understand why an opening balance isn't part of  
 13 transaction data.  
 14 Q. Data relating to a transaction that's done by the  
 15 branch. It didn't delete that. I rather thought you  
 16 were going to accept that because you said:  
 17 "Whilst this is not necessarily deletion of  
 18 transaction data ..."  
 19 Are you suggesting that deleting an opening balance  
 20 is deletion of transaction data?  
 21 A. Well, it changes the postmaster's accounting position.  
 22 But, no, I can accept that it isn't one of the  
 23 transactions of selling things or paying your money or  
 24 whatever, but it would have an effect on --  
 25 Q. This is the one other example of SQL scripts that you

155

1 have seen, privileged user access that you have seen  
 2 affecting branch accounts?  
 3 A. Yes.  
 4 Q. So there are the three PEAKs that we discussed before  
 5 the court broke?  
 6 A. Yes.  
 7 Q. And then there's this one other PEAK?  
 8 A. Yes.  
 9 Q. And those are the examples of which you are aware,  
 10 correct?  
 11 A. I believe there are some more, these are examples.  
 12 There are other examples of SQL statements --  
 13 Q. Which are similar to these ones? Presumably you put  
 14 them in your report because you felt these were the ones  
 15 that the court should be told about?  
 16 A. Yes, there are others but --  
 17 Q. These are representative of those others?  
 18 A. Yes.  
 19 Q. Thank you. So let's go very quickly to {F/611/1},  
 20 please. This is dated 15th April 2010, so it is during  
 21 the -- it was a branch which had migrated to  
 22 Horizon Online during the pilot project, do you  
 23 remember?  
 24 A. Yes.  
 25 Q. So there were a relatively small number of branches that

156

1 were sort of being tested, and this was one of them and  
2 it had a problem.

3 If we could go to the first box on page 1 about  
4 halfway down, it says underneath the double line:

5 "When rolling over and doing branch trading  
6 statements site gets message unable to connect to the  
7 data centre."

8 Do you see that?

9 A. Yes.

10 Q. So the branch had a problem that it couldn't roll over,  
11 yes?

12 A. Mm.

13 Q. If we go over to page {F/611/2}, about two-thirds of the  
14 way down the page, 13th April at 13.33:

15 "The branch did not complete their office rollover  
16 properly on 17 March so the office is still in TP 11  
17 although all the stock units are in TP 12. There was no  
18 system failure - it looks as if they pressed cancel  
19 instead of confirm at the end of the rollover process."

20 So at that early stage it appears it might be some  
21 human intervention that's responsible.

22 Then if one goes to the bottom of page 2 but more  
23 particularly on the top of page {F/611/3}, this is  
24 Anne Chambers again. She says at the top of page 3:

25 "I've retrieved logs of an attempt to roll the

157

1 office from TP 11 to 12, at 9:51 UTC 12th April.

2 "All looks ok - trading statement is printed, and  
3 they press confirm."

4 If we go down a couple of paragraphs.

5 A. So it says something has timed out at the counter,  
6 hasn't it.

7 Q. "I suspect this may be because there is already a single  
8 entry in BRDB\_SU\_OPENING\_BALANCE for DEF TP 12 BP 1,  
9 inserted during migration. The entry is for cash, zero  
10 value."

11 A. Right.

12 Q. So just stopping there, what has happened is that this  
13 branch has newly migrated as part of the pilot scheme,  
14 and as part of the migration there has been a glitch or  
15 something which has resulted in the entry of a false  
16 figure for the next balancing period. There shouldn't  
17 be anything there at all, should there?

18 A. That is right.

19 Q. But instead, as part of the process of pilot scheme  
20 migration, a figure of zero has crept in which is  
21 plainly wrong, yes?

22 A. Yes.

23 Q. And the fact that there is a zero for the forthcoming  
24 balancing period means that the branch can't roll into  
25 that balancing period, correct?

158

1 A. Yes.

2 Q. So if we go down the page to 14th April at 13.00 hours,  
3 this is Gareth Jenkins:

4 "I've had a look at this PEAK and agree that we need  
5 an OCP to tidy up BRDB to unstick this branch. Note  
6 that what I'm proposing here is slightly different from  
7 what Anne has suggested above."

8 He suggests the text that you quoted in your report.

9 So first of all he wants to update the stock units,  
10 setting the trading period to 11. Yes?

11 A. Yes.

12 Q. So the stock units, which are already in trading period  
13 12, the branch isn't but the stock units are, he wants  
14 to re-set the stock units so they are back in trading  
15 period 11, yes?

16 A. Yes.

17 Q. And that is an updating operation yes?

18 A. Yes.

19 Q. Secondly, he wants to delete the opening figures for the  
20 next period -- the opening balance for the next trading  
21 period --

22 A. Yes.

23 Q. -- to get rid of that rogue zero?

24 A. Yes.

25 Q. And by that means the stock units and the branch will be

159

1 in the same trading period, first of all?

2 A. Yes.

3 Q. And secondly, because the zero is no longer in the way,  
4 they will both be able to roll over, correct?

5 A. Yes.

6 Q. And as a result of rolling over, what will the opening  
7 position of the branch be?

8 A. Whatever it should be.

9 Q. Exactly. It will be an aggregation of all the  
10 transactions that have been undertaken in the branch  
11 since the previous -- the beginning of that trading  
12 period.

13 A. Yes.

14 Q. So what's being done here is something that doesn't  
15 change any transaction data, it doesn't insert any new  
16 transactions that have a value and so on in the branch.  
17 It is simply a form of SQL script which allows the  
18 automatic process of aggregation of transactions to be  
19 undertaken in a way that isn't blocked by the glitch  
20 that's introduced as part of the migration process  
21 during the pilot roll out, yes?

22 A. Yes.

23 Q. And I think you may agree that there definitely wasn't  
24 a change to transaction data, and there definitely  
25 wasn't any change which in any way modified the

160

1 accounting position of the branch, by which I mean --  
 2 which raised the risk of the branch having the wrong  
 3 accounting position as compared with what it should  
 4 have?  
 5 A. Yes, I agree.  
 6 Q. Thank you. And would I be right in thinking that you  
 7 have only seen a relatively few number of PEAKs of this  
 8 sort?  
 9 A. There are a few PEAKs that do contain SQL statements.  
 10 There are other PEAKs that refer to the need to use SQL  
 11 but don't contain statements such as this.  
 12 Q. Let's move on to -- just to sum up, you have reviewed  
 13 thousands of KELs, Mr Coyne, thousands of PEAKs,  
 14 thousands of OCPs, OCRs and MSCs, and you have done lots  
 15 of intelligent searches through all of those documents,  
 16 yes?  
 17 A. Mm.  
 18 Q. Would I be right in thinking that in that process you  
 19 have been looking for instances of remote access  
 20 affecting branch accounts of the sort we have been  
 21 discussing?  
 22 A. Yes.  
 23 Q. Given this covers a 20-year period, and given the number  
 24 of branch accounts that have been created during that  
 25 period and the number of transactions which have been

161

1 done during that period, you have found relatively few,  
 2 haven't you?  
 3 A. From the documents that we have reviewed using the  
 4 search terms, yes.  
 5 Q. And the evidence that you have seen from the documents  
 6 you found shows that Fujitsu is generally reluctant to  
 7 make changes that would have an effect on branch  
 8 accounts, yes?  
 9 A. Yes.  
 10 Q. And it is generally -- in fact it is always careful to  
 11 ensure it is only done when necessary and that it is  
 12 done with great care?  
 13 A. I have to say generally, I don't know if it's always --  
 14 Q. Generally. Have you seen --  
 15 A. Always is just an absolute.  
 16 Q. Oh, simply because you don't want to say it never  
 17 happened. But the documents you have seen, you have not  
 18 seen any documents which clearly show a careless  
 19 attitude whether to the transaction being done, to the  
 20 particular form of remote access being undertaken, or to  
 21 getting the appropriate consent to undertake the  
 22 transaction?  
 23 A. No.  
 24 Q. Thank you. Now you make some criticisms of the  
 25 permission control regime applied at Fujitsu and for

162

1 that purpose you rely on two documents, don't you, you  
 2 rely on the Ernst & Young management letter of 2011 and  
 3 you also rely on the minutes of the Risk & Compliance  
 4 Committee meeting that we discussed a couple of days  
 5 ago.  
 6 A. Yes.  
 7 Q. The impression that's given in your reports is that  
 8 Fujitsu has poor controls which could expose the system  
 9 to a risk of poor actions being done, yes?  
 10 A. Yes.  
 11 Q. But in all the documents you have searched through you  
 12 have actually not found any significant evidence of poor  
 13 actions being done, have you?  
 14 A. No, but in a lot of documents you will see, for example,  
 15 the term user APPSUP, but then you don't see what  
 16 follows so we don't see what the actions are.  
 17 Q. Let's look at the Ernst & Young management letter. We  
 18 have already talked about the Risk & Compliance  
 19 Committee minutes. Could we go to {F/869/1}, please.  
 20 You refer to this a lot in both reports, particularly in  
 21 your second report. Could I ask you first of all to go  
 22 to page {F/869/3}. This is the executive summary.  
 23 Perhaps I could ask you to read it. (Pause)  
 24 A. Yes.  
 25 Q. I'm going to deal with each of those four key

163

1 recommendations but I'm going to start with the change  
 2 management process because it is fair to say, isn't it,  
 3 that that's the section you focus on mostly in your  
 4 reports, wouldn't you say so?  
 5 A. Change management and permissions.  
 6 Q. If we could go to your second report, it is  
 7 {D2/4.1/178}, please. At paragraph 5.196 you say:  
 8 "There is evidence of deficiencies in change  
 9 management as recorded in the letter."  
 10 So you regard this letter as being evidence of  
 11 deficiencies, do you?  
 12 A. Evidence that the auditors identified deficiencies, yes.  
 13 Q. But wouldn't you agree that the word "deficiency" or  
 14 "deficiencies" is only mentioned twice in the letter, is  
 15 that right?  
 16 A. I think with regard to weaknesses.  
 17 Q. If we look at page {F/869/11}. This is "Payroll Control  
 18 Environment", and do you know, I haven't marked the word  
 19 "deficiencies", but somewhere on this page there is the  
 20 word "deficiencies". But that's to do with payroll,  
 21 correct?  
 22 A. Yes, I do not think it will be this section that I've  
 23 referred to.  
 24 Q. Let's go back to page {F/869/3}, to the second paragraph  
 25 of the executive summary.

164

1 A. Yes.  
 2 Q. They say, the last sentence:  
 3 "The recommendations we have made in this report  
 4 should be seen as refinements rather than fundamental  
 5 control deficiencies in comparison."  
 6 Do you see that?  
 7 A. Right, yes.  
 8 Q. Now, would it not be thought that Ernst & Young are  
 9 actually refraining from saying that these are  
 10 deficiencies?  
 11 A. Yes, but this is the executive summary. I think if you  
 12 go to the detailed findings.  
 13 Q. I see. It is correct, isn't it, that this letter  
 14 doesn't identify any harmful events having taken place  
 15 as a result of the change management process, is that  
 16 right?  
 17 A. Yes.  
 18 Q. If we could move on to your second report, I'm sorry to  
 19 leap around like this, it is {D2/4.1/195}. At  
 20 paragraph 5.264 you say:  
 21 "Regarding the specific recommendations in the 2011  
 22 audit it is my opinion that the key recommendations  
 23 directly impact on some of the 18 countermeasures  
 24 outlined in Dr Worden's report and therefore are  
 25 relevant to the question of robustness of Horizon since

165

1 they offer an opportunity to improve these  
 2 countermeasures which it appears Post Office chose not  
 3 to take. I have listed below the four key  
 4 recommendations ..."  
 5 On what basis do you say in this report that it  
 6 appears that Post Office chose not to take the  
 7 opportunity to improve the countermeasures as  
 8 recommended?  
 9 A. This document is -- there was a risk identified to the  
 10 Post Office and Post Office chose not to mitigate it in  
 11 the way suggested by Ernst & Young.  
 12 Q. Hold on, you are talking about recommendations. You are  
 13 talking about -- you appear to be talking about the key  
 14 recommendations and forgive me, Mr Coyne, but you appear  
 15 to be saying that Post Office chose not to act in  
 16 response to those recommendations. Is that not the  
 17 impression that's given by this paragraph?  
 18 A. Yes. I think this is covered -- is it 5.197 in my  
 19 report which relates to the document you just took me  
 20 to, it was the table at section 2.  
 21 Q. 5.197?  
 22 A. Yes. {D2/4.1/178} You took me to the executive summary  
 23 before, but the section that I comment on in the report  
 24 is the table at section 2, points 12 to 15.  
 25 Q. So you are saying the table at section 2 supports your

166

1 inference or your understanding that Post Office chose  
 2 not to take action in response to the recommendations by  
 3 Ernst & Young. Is that what you are saying?  
 4 A. So section 2 deals with points that were made in the  
 5 previous year. Section 4 is specific points made for  
 6 the current year.  
 7 Q. Yes. So section 2 won't justify an assertion that the  
 8 key recommendations that are in section 4, Post Office  
 9 chose not to react to them because it is to do with past  
 10 events, yes?  
 11 A. Can we go to that document?  
 12 Q. Yes, it is at {F/869/1}. What I'm proposing to do,  
 13 Mr Coyne, but if you would like me to do something else  
 14 do tell me, is to take you to the particular provisions  
 15 of the letter in which recommendations are made and to  
 16 see whether it is fair to say that Post Office chose to  
 17 take no action to improve the position in response.  
 18 Would that be a fair thing to do?  
 19 A. Yes.  
 20 Q. Let's do that. If we could go first of all to page  
 21 {F/869/23}, this is "Improve governance of outsourcing  
 22 application management", and it goes on for two pages,  
 23 you see?  
 24 A. Yes.  
 25 Q. If you look at the far right column entitled "Management

167

1 Comment", you will see it starts with the words:  
 2 "Work on improving ..."  
 3 A. Yes.  
 4 Q. "... has already commenced ..."  
 5 Do you see that?  
 6 A. Yes.  
 7 Q. That's work that Post Office and Fujitsu are carrying  
 8 out and it runs over to the second page. It is quite  
 9 long, isn't it?  
 10 A. Yes.  
 11 Q. So this doesn't suggest that Post Office chose not to  
 12 take action in relation to this particular  
 13 recommendation, correct?  
 14 A. Yes.  
 15 Q. So let's try another one. If we go to page {F/869/25},  
 16 this is "Segregation of duties within the manage change  
 17 process". If you look at the far right-hand column this  
 18 time, "Management Comment", it says -- the very first  
 19 line reads:  
 20 "A Fujitsu project has been established to review  
 21 all user management areas and is being led by the CISO  
 22 of the RMG account.  
 23 "Fujitsu will provide and agree with POL a clear  
 24 segregation of duties guideline for Senior management  
 25 and line managers ..."

168

1 It goes on for several pages, do you see?  
 2 A. Yes.  
 3 Q. Would you agree that this doesn't suggest that  
 4 Post Office chose not to take action in response to the  
 5 second key recommendation. Do you think that's fair?  
 6 A. Yes, I think that's fair.  
 7 Q. If we move on to page {F/869/29}, this is the third key  
 8 recommendation of strengthening the change management  
 9 process. I pause to note in the middle column, the  
 10 "Recommendation" column:  
 11 "Management should enhance the current change  
 12 management process ... to include."  
 13 The word "enhance" doesn't usually connote  
 14 deficiency, it connotes room for improvement, would you  
 15 agree with that?  
 16 A. Yes.  
 17 Q. Then if you look in the far column it starts by saying:  
 18 "Work has commenced on the strengthening of the  
 19 change management process:  
 20 "Centralisation of approvals for change for POL  
 21 within Fujitsu is to be established."  
 22 It goes on for another page and another page, and  
 23 another page and another page. It goes on for pages,  
 24 actually, all the way to page {F/869/38}. It finishes  
 25 at page 36, I see. So quite a lot of things being done

169

1 in relation to the recommendation that there be  
 2 a strengthening -- an enhancement of the change  
 3 management process, would you agree with that?  
 4 A. Yes, one of the recommendations that I recall reading in  
 5 this document is that Post Office should be aware that  
 6 Fujitsu automatically tell them of changes to Horizon --  
 7 Q. That's quite interesting, Mr Coyne, because we discussed  
 8 that, do you remember, when we talked about the risk  
 9 management committee minutes a couple of days ago.  
 10 That's one recommendation. In paragraph -- in the  
 11 relevant paragraph of your report you talk about the  
 12 recommendations, plural.  
 13 The impression that you are obviously seeking to  
 14 achieve in your report is that four key recommendations  
 15 were made and Post Office chose to do nothing about any  
 16 of them. Do you not accept that that was the impression  
 17 that was given by the relevant paragraph of your second  
 18 report?  
 19 A. No, I think what the paragraph in my report says is that  
 20 there were recommendations that weren't taken up.  
 21 Q. Would you give me a moment, please, Mr Coyne?  
 22 A. Certainly.  
 23 Q. Mr Coyne, you raised the proposal that was considered at  
 24 the Risk & Compliance Committee meeting I think in 2012  
 25 and you suggested that that proposal was contained in

170

1 the 2011 Ernst & Young management letter. Are you sure  
 2 about that?  
 3 A. It was my perception that it had come from one of the  
 4 Ernst & Young --  
 5 Q. It came from the 2012 Ernst & Young audit report. Do  
 6 you remember that?  
 7 A. Right, yes.  
 8 Q. It didn't come, I don't believe, from the 2011 letter?  
 9 A. I thought the letter was a distillation of the main  
 10 points in the report.  
 11 Q. The 2011 Ernst & Young management letter accompanied the  
 12 2011 audit, yes?  
 13 A. Right.  
 14 Q. And the following year there was a 2012 audit.  
 15 A. Right.  
 16 Q. And in the 2012 audit there was a recommendation that  
 17 perhaps the system could be enhanced by adopting  
 18 an automatic monitoring system rather than the manual  
 19 one that was currently operated. Does that ring a bell?  
 20 A. Yes.  
 21 Q. I'm just wondering whether you would like to reconsider  
 22 your evidence that in 2011 it was proposed that this  
 23 automatic monitoring system should be adopted?  
 24 A. It might be a mistake, maybe it should be 2012.  
 25 Q. This may be slightly unfair to you, and it is a long

171

1 document, but let's assume that it doesn't contain that  
 2 proposal, that the 2011 management letter didn't contain  
 3 that recommendation, and if it is an unfair assumption,  
 4 and I will check it overnight, I will come back tomorrow  
 5 morning and apologise to you.  
 6 But on that assumption which I believe to be  
 7 correct, so far we have not seen any proposal made by  
 8 Ernst & Young in relation to which Post Office has not  
 9 chosen to take any action at all, would you agree?  
 10 A. I would agree.  
 11 Q. Of course it is to be expected that when an auditor  
 12 makes recommendations, there will be a -- I don't want  
 13 to say a negotiation, but one doesn't assume that every  
 14 single proposal will be accepted in every material  
 15 particular. There's always going to be some room for  
 16 discussion, "Well, maybe we could achieve that objective  
 17 in a different way". That is part of the normal process  
 18 by which auditors deal with their appointors and vice  
 19 versa, do you agree?  
 20 A. Yes.  
 21 Q. But subject to points of that sort, are you aware of  
 22 anything that was recommended in the 2011 letter that  
 23 wasn't addressed in some way by Post Office in response  
 24 to that letter, and indeed in the very letter itself in  
 25 the "Management Comment" section?

172

1 A. It could well be that. It could well be that the 2012  
2 document looks back at the findings of 2011 and provides  
3 an update on that and that's why I say it was 2011.  
4 Q. That's not actually an answer to my question. Let's  
5 finish the list and then we can look at 2012.  
6 If we go to page {F/869/47}, this is the fourth key  
7 recommendation, "Review of generic privileged accounts."  
8 If you look at the far right, "Management Comment",  
9 you will see:  
10 "A Fujitsu project has been established to review  
11 all user management. This is to include all system/s,  
12 accounts and privileges.  
13 "Monitoring and communication will be provided to  
14 POL through the regular embedded BAU ..."  
15 That is business as usual:  
16 "... process to ensure access to control management  
17 is robust."  
18 Do you see that?  
19 A. Yes.  
20 Q. So it wouldn't be fair to say, would it, that no action  
21 was taken in relation to that fourth key recommendation  
22 either?  
23 A. Well, nothing got done or got improved over it, and we  
24 can see that from the PEAK where Fujitsu are trying to  
25 address --

173

1 Q. So what you are suggesting is that -- there were  
2 obviously audits in later years?  
3 A. Yes.  
4 Q. And are you suggesting the auditors in later years found  
5 a deficiency in Post Office's approach to the  
6 recommendation they had made in 2011?  
7 A. No, what I'm saying is it might not be the auditors that  
8 found future deficiencies after the initial observation  
9 but that the situation with privileged user access logs  
10 wasn't corrected.  
11 Q. Mr Coyne, would you agree with me that in principle the  
12 best people to judge whether action is being taken to  
13 address recommendations made by auditors is the auditors  
14 themselves rather than you, would you agree with that?  
15 A. Yes.  
16 Q. Let's look to see what the auditors said in later years.  
17 Could I ask you to go to {F/1138/1}, this is the 2013  
18 audit of Post Office. If we could go to page {F/1138/7}  
19 of that document. I'm afraid you are going to have to  
20 give me a moment, Mr Coyne, I haven't marked this piece  
21 of paper. I apologise.  
22 A. That's fine.  
23 Q. Here we are. I'm sorry for wasting time. At the bottom  
24 of the page, item 3, "POLSAP periodic user access  
25 review":

174

1 "In the 2011/12 audit ..."  
2 So that's the next year's audit:  
3 "... we recommended improvements to the periodic  
4 user access review process and monitoring controls we  
5 noted the efforts by management to strengthen the  
6 control environment this year by implementing a periodic  
7 user review for Cash Centre POLSAP users. However,  
8 finance users are currently not included in the review."  
9 If you look at the far right column in response,  
10 management says "Complete".  
11 Then if we go back to page 4 --  
12 A. Just before we do so, it is just not included in the  
13 audit any more.  
14 Q. Say again?  
15 A. So what it is saying is it is not being included in the  
16 audit any more.  
17 Q. What's not being included in the audit any more?  
18 A. The review. Can we go back one page, please.  
19 Q. Is this to page {F/1138/7}?  
20 A. Yes. So in 2011/12 improvements were recommended. We  
21 noted efforts. But then it goes on to say:  
22 "However, finance users are not currently included  
23 in the review."  
24 Q. Yes.  
25 A. Should I take that to mean that the scope of the audit

175

1 has been reduced not to look at finance any more?  
2 Q. If you look at the far right-hand column there is  
3 an answer to your question:  
4 "Complete."  
5 "Finance undertook a review of their users and  
6 periodic reviews are planned. There will be an  
7 additional monthly user report for finance provided via  
8 service management ..."  
9 So Mr Coyne, the answer to your question is no.  
10 A. Right.  
11 Q. Let me get this straight. You were aware of these  
12 documents when you made your statement in your second  
13 report --  
14 A. Yes.  
15 Q. -- that Post Office had chosen not to take action? You  
16 had seen the later audits by Post Office, hadn't you?  
17 A. Yes.  
18 Q. You wouldn't make a claim of that sort if you hadn't  
19 looked at the later documents to actually see what the  
20 auditors were saying, would you?  
21 A. Yes. And at number 4 is one of the reference about  
22 accepting that the risk exists.  
23 Q. Yes, this is where the proposal is made.  
24 A. Yes.  
25 Q. This is where the proposal is actually made which is

176

1 then later on considered by the Risk & Compliance  
 2 Committee minutes?  
 3 A. Yes.  
 4 Q. That has nothing to do with the claim we are currently  
 5 addressing, the claim you make in your second report,  
 6 that Post Office chose not to take the opportunity to  
 7 improve its procedures in response to the key  
 8 recommendations made in the 2011 Ernst & Young  
 9 management letter, do you see?  
 10 A. Right, so this is the 2012 audit and this is the first  
 11 time that that issue has arisen, is that what you are  
 12 putting to me?  
 13 Q. Mr Coyne, I'm not sure whether the proposal was made in  
 14 2012 as well as 2013 but I'm not aware that the proposal  
 15 was made in 2011.  
 16 A. Right, okay. But the principal point is that increased  
 17 monitoring was suggested by the auditors to put controls  
 18 in place to validate programme changes to Horizon and  
 19 POLSAP and that Post Office's decision was to accept  
 20 that the risk existed.  
 21 Q. Here's what's interesting to me, Mr Coyne. In your  
 22 second report you made a criticism which is limited  
 23 entirely to the 2011 Ernst & Young management letter.  
 24 It is a criticism you repeat many times in your second  
 25 report, would you agree?

177

1 A. Mm.  
 2 Q. And the criticism is these key recommendations were made  
 3 and Post Office chose not to take them up, not to react  
 4 to them, not to take the opportunity to improve with  
 5 regard to the recommendations that were made. That was  
 6 the claim that you made. And I think you have agreed  
 7 with me that when you made that claim you took the  
 8 trouble to look at later audit reports, and did you also  
 9 look at the Fujitsu service audit reports that were also  
 10 in existence? Did you look at those?  
 11 A. Yes.  
 12 Q. So you looked at all those documents, and having seen  
 13 what was in those documents you felt it appropriate to  
 14 say that Post Office had chosen not to take the  
 15 opportunity to improve. What I'm suggesting to you is  
 16 that the evidence is not consistent with that rather  
 17 damning judgment. It might be that Post Office didn't  
 18 react immediately and accept every jot and tittle of  
 19 every recommendation that was made, but you have already  
 20 fairly accepted that in the real world when proposals  
 21 and recommendations are made by auditors there is always  
 22 room for decision as to how much of the recommendation  
 23 should be decided, yes?  
 24 A. Yes.  
 25 Q. So what I'm suggesting to you, Mr Coyne, is that key

178

1 recommendations were made in the 2011 letter and the  
 2 criticism that you choose to level at Post Office on the  
 3 basis of those recommendations and on the basis of  
 4 Post Office's response to those recommendations is not  
 5 justified by the evidence that you yourself agree that  
 6 you had seen. Now how would you respond to that?  
 7 A. It appears that I have made a mistake and should have  
 8 referred to the 2012 audit.  
 9 Q. And if we go back to page {F/1138/4}. Hold on, are you  
 10 making an assertion now about the 2012 audit or are you  
 11 making an assertion about this audit here that we are  
 12 now looking at which is the 2013 one?  
 13 A. I would have to check what the 2012 audit said as well.  
 14 MR JUSTICE FRASER: We are in 2013 at the moment and  
 15 Mr de Garr Robinson is taking you to page 4.  
 16 MR DE GARR ROBINSON: Let's go to page {F/1138/4}. Under  
 17 the heading "Summary of IT control observations", do you  
 18 see that? If we go to the second paragraph.  
 19 A. Yes.  
 20 Q. "This year, we have not identified significant  
 21 exceptions in our independent testing of POL-operated  
 22 controls. We have, nevertheless, identified a small  
 23 number of improvement opportunities to enhance the  
 24 effectiveness of recently implemented controls and  
 25 further improve some of POLSAP's security settings. It

179

1 should be noted that these control enhancements did not  
 2 have an adverse impact on our ability to place reliance  
 3 on the effectiveness of automated controls within HNGX  
 4 and POLSAP for financial statement audit purposes."  
 5 Do you see that?  
 6 A. Yes.  
 7 Q. That is quite close to what in the audit world could be  
 8 regarded as a ringing endorsement, isn't it, Mr Coyne?  
 9 A. Yes.  
 10 Q. If we go to page {F/1138/8} to see what small number of  
 11 enhancements they are proposing in relation to HNGX ...  
 12 (Pause)  
 13 Now I'm slowing you down, Mr Coyne. I do apologise.  
 14 I should have marked this document properly before  
 15 I came to it  
 16 (Pause)  
 17 So it is page 8 of the document. In column 4, you  
 18 will see "Change management monitoring control"?  
 19 A. Yes.  
 20 Q. They say:  
 21 "As part of management's initiative to strengthen  
 22 the control environment, we noted that POL implemented a  
 23 monitoring control to validate whether program changes  
 24 to HNGX and POLSAP have been authorised, tested and  
 25 approved prior to migration into the production

180

1 environment. However, the monitoring control does not  
 2 make use of a list of changes generated directly from  
 3 POLSAP or HNGX, and hence there is a risk that some  
 4 changes are omitted from the monitoring control.”  
 5 The recommendation is:  
 6 “Management should make use of a system-generated  
 7 list of changes in performing the monitoring  
 8 control ...”  
 9 And the management comment is:  
 10 “Accept the risk. Engaged with service management  
 11 and Fujitsu. System generated lists are not feasible as  
 12 they are based on events that the system generate of  
 13 which there are multiple thousands per week change  
 14 process for monitoring is considered robust through the  
 15 existing ticket based approach that review changes  
 16 against the MSC list. This will be noted to the Audit  
 17 Committee with the November update and the Risk &  
 18 Compliance committee endorsed the recommendation on 18th  
 19 September 2013 to accept the risk.”  
 20 So the recommendation is made in 2013 and the  
 21 response given by Post Office is actually it is not  
 22 feasible. Do you see that?  
 23 A. Yes, I think it is actually based on a misunderstanding  
 24 of what the weakness that was identified was.  
 25 Q. Let’s not worry about misunderstandings. Just take it

181

1 in stages. The HNG-X recommendation we have seen is in  
 2 order to enhance effectiveness, yes?  
 3 A. Yes.  
 4 Q. It is not a serious deficiency in relation to which  
 5 a key recommendation of serious importance is being  
 6 made, would you agree?  
 7 A. Agreed.  
 8 Q. It is an opportunity for enhancement to improve  
 9 something that is already adequate, would you agree with  
 10 that?  
 11 A. Well, it certainly is an improvement. Whether it was  
 12 adequate already I can’t say.  
 13 Q. But what you can’t say then by the same token is that  
 14 the situation without the improvement was deficient.  
 15 That’s certainly something you can’t say, would you  
 16 agree?  
 17 A. In my experience I haven’t seen a company that’s been in  
 18 a situation where programme changes are made to two key  
 19 systems and the customer is not aware of those changes.  
 20 Q. Mr Coyne, we would be on the same page if the true  
 21 position was that there was no communication of changes  
 22 by Fujitsu to Post Office, but that’s not the position.  
 23 We lacked at the Risk and Recommendation Committee  
 24 minutes a couple of days ago. We also looked at the  
 25 document, was it minutes, that preceded that meeting

182

1 which explained in much greater detail what the factors  
 2 were and what the cost was and so on.  
 3 The fact is there was a system for communicating  
 4 changes. It was a manual system that was checked on  
 5 a monthly basis and Fujitsu are saying, do you know, it  
 6 would be an enhancement if you could make it automatic.  
 7 Ernst & Young, I’m so sorry. It would be  
 8 an enhancement, not a serious deficiency but it would be  
 9 an enhancement, it would be an improvement if you could  
 10 make it automatic and it went to the Risk & Compliance  
 11 Committee. They worked out that it would cost  
 12 £1 million because of the way that the system was  
 13 configured and they came to the overall view that the  
 14 appropriate thing to do would be to make no change at  
 15 this stage but monitor the monitoring process more  
 16 closely to see if any adverse events arose and if they  
 17 did arise then they would review the recommendation  
 18 again. Do you remember our discussing that?  
 19 A. Yes.  
 20 Q. And I think I’m right in saying that when we discussed  
 21 that you indicated that that was not an unreasonable  
 22 approach.  
 23 A. It is a poor position to be in in the first place but it  
 24 is not an unreasonable approach.  
 25 Q. Mr Coyne why do you say, in fact how do you feel it

183

1 appropriate for you to say it is a poor position for  
 2 Post Office to be in when the very people that are  
 3 making the recommendation are only doing so on the basis  
 4 that it is an enhancement. They are not saying there is  
 5 a deficiency that needs to be addressed. So why is it  
 6 you are taking it upon yourself to take a much stronger  
 7 view of steps that should be taken than Ernst & Young  
 8 itself?  
 9 A. Because that is the situation that you should be in in  
 10 order to be confident about your systems that are being  
 11 supplied to you.  
 12 Q. Right. One final question in relation to that, the  
 13 proposal that we are talking about of course has nothing  
 14 to do with the kind of remote access that we are  
 15 considering does it?  
 16 A. Agreed.  
 17 Q. So actually we have just spent the last ten minutes  
 18 discussing your criticism of Post Office, it is  
 19 a criticism which actually doesn’t arise in relation to  
 20 the access control programme -- the access control  
 21 principles that are applied in relation to Post Office’s  
 22 business, would you agree?  
 23 A. Agreed.  
 24 Q. So I would suggest to you Mr Coyne that having regard  
 25 not just to the 2011 management letter, which says some

184

1 things that read in isolation might be seen as negative,  
 2 but having regard also to the 2013 audit reports and  
 3 Ernst & Young's views expressed in that, what comes over  
 4 is a very different picture from the one that you depict  
 5 in your second report?  
 6 A. I thought you were going to take me to the part of the  
 7 Ernst & Young report that dealt with user access and  
 8 privileged users.  
 9 Q. The 2011 report?  
 10 A. Yes.  
 11 Q. Well, do you remember I took you through the table with  
 12 each of the recommendations and I took you to each of  
 13 the comments as to what Post Office was doing in  
 14 response to them. Do you remember that?  
 15 A. I do not think that was in regard to privileged user  
 16 access.  
 17 Q. It was in regard to the four key recommendations that  
 18 you refer to in your expert report, which I'm asking you  
 19 about. Do you see?  
 20 A. Right.  
 21 Q. What I'm suggesting to you is that, in order to give  
 22 a balanced and fair assessment of Post Office's  
 23 position, it would have been not only appropriate but in  
 24 fact I would suggest necessary also to refer to the  
 25 things that were said in the 2013 audit and I would like

185

1 to ask you, Mr Coyne, why you chose not to say anything  
 2 about the 2013 audit?  
 3 A. I'm confused because this doesn't relate to the remote  
 4 access point. So we have talked all about remote  
 5 access. My understanding was you were going to take me  
 6 to the remote access part of this for me to comment on.  
 7 Q. Mr Coyne, I'm not going to debate with you what I'm  
 8 going to ask you about and what I'm not going to ask you  
 9 about. I would like to ask you -- the question I asked  
 10 you is, having felt it appropriate to criticise  
 11 Post Office's approach and to claim that Post Office had  
 12 chosen to take no action on the basis of four key  
 13 recommendations made in the 2011 Ernst & Young letter,  
 14 and having repeated that point several times in your  
 15 second report, my question to you is why you felt it  
 16 appropriate not to mention the 2013 report? Do you not  
 17 think that would have been a fair thing to do?  
 18 A. I agree that providing any additional material would be  
 19 helpful.  
 20 Q. So why did you choose to leave it out?  
 21 A. It wasn't a conscious decision to leave anything out.  
 22 Q. If I may say so, Mr Coyne, it must have been a conscious  
 23 decision to report the negative things that were  
 24 contained in the 2011 management letter, but are you  
 25 saying that was conscious but leaving out the 2013

186

1 audit, that wasn't conscious, that was -- what are you  
 2 saying?  
 3 A. I was attempting to identify areas of lack of control  
 4 that could have led to bugs, errors and defects.  
 5 Q. What you were trying to do, Mr Coyne, may I suggest, is  
 6 that you were trying to find things, trying to find  
 7 coconuts to lob at Post Office and you were not very  
 8 interested in whether Post Office had some kind of  
 9 shield that it could raise to the coconuts that you  
 10 would be lobbing, would that be fair?  
 11 A. No, it wouldn't be fair because it is not about largely  
 12 irrelevant aspects where improvements have made, it is  
 13 where aspects that are relevant to this dispute haven't  
 14 been dealt with, such as control and change to software.  
 15 Q. Would you give me a moment please. (Pause).  
 16 I would like to spend a few minutes now, at the end  
 17 of my cross-examination in this area, discussing another  
 18 set of documents that you didn't refer to in your second  
 19 report, which is the service audits that Dr Worden  
 20 referred to in his report.  
 21 As well as performing financial audits with  
 22 Post Office, Ernst & Young also performed audits for  
 23 Fujitsu's IT infrastructure services supporting POLSAP  
 24 and Horizon Online, didn't they?  
 25 A. Yes.

187

1 Q. From 2016 these service audits also covered a review of  
 2 Credence, didn't they?  
 3 A. I think that's right, yes.  
 4 Q. Would you agree that service audits by Ernst & Young are  
 5 rather more specific than the general financial audits  
 6 that would have been done by Ernst & Young for  
 7 Post Office's general accounts?  
 8 A. Yes.  
 9 Q. Now we have the service audits in the trial bundles for  
 10 the years 2012, 2013, 2014, 2015, 2016 and 2017.  
 11 I don't have time to take you to them all but let's just  
 12 look at 2012. Could we go to {F/1041/1} please. So  
 13 this is a description of Fujitsu's system of:  
 14 "IT Infrastructure Services Supporting Post Office's  
 15 POLSAP and HNG-X Applications throughout the period  
 16 April 2012 to December 2012 with the independent service  
 17 auditor's assurance report including test performed and  
 18 results thereof."  
 19 Now, have you read those documents?  
 20 A. I believe I have, yes.  
 21 Q. Let's go -- there are a number of control objectives,  
 22 aren't there?  
 23 A. Yes.  
 24 Q. What Ernst & Young does is it expresses its opinion on  
 25 how -- whether there are deviations or not from the

188

1 appropriate -- what should be the appropriate approach  
 2 to each of those control objectives, would you agree?  
 3 A. Yes.  
 4 Q. So if we go to access control, which I am sure you will  
 5 agree is quite an important one in the present context.  
 6 Let's go to page {F/1041/83}. It is control objective  
 7 10.  
 8 "Control objective 10: Controls provide reasonable  
 9 assurance that access to system resources, including  
 10 computing platforms and operating systems is restricted  
 11 to properly authorised individuals."  
 12 You will see that there is a series of, what does  
 13 one call them? Tests on the left-hand side from 10.1  
 14 through to 10.7.  
 15 A. They are statements in which to benchmark against.  
 16 Q. Yes. Thank you.  
 17 So there are these seven checks/statements and if we  
 18 run through them all -- perhaps you could read them to  
 19 yourself. (Pause).  
 20 A. Yes.  
 21 Q. You will see -- I have to say Mr Coyne I'm terribly  
 22 impressed by how fast you read, you are much quicker  
 23 than I am. I'm rather envious.  
 24 But if you look at the right-hand column it is  
 25 headed "Results of Tests". You see that for all of

189

1 those tests there are no deviations noted except for the  
 2 third one.  
 3 MR JUSTICE FRASER: I think we need to go back a page.  
 4 MR DE GARR ROBINSON: Which is at page {F/1041/83}. There  
 5 they say:  
 6 We selected a sample of 12 platforms within the  
 7 in-scope applications. The Group Policy on failed access  
 8 attempts that manages access to all these servers was  
 9 set to disable accounts after 6 consecutive failed  
 10 access attempts; the POL setting should be to disable  
 11 accounts after 3 failed access attempts. The other  
 12 settings tested were in line with the POL requirements.  
 13 No other deviations noted."  
 14 You will see the "Management Response":  
 15 "Management accept this deviation and will. Rectify  
 16 at the next revision of the Policy document ..."  
 17 And they set out what the document is. That's quite  
 18 good, isn't it?  
 19 A. Yes, there's very little noted there.  
 20 Q. And would it be fair to say that there are no other --  
 21 in all the later years, 2013, 2014, 2015, 2016, 2017,  
 22 there are no deviations of any sort in relation to  
 23 control objective 10. Does that ring a bell?  
 24 A. I think I have made a mistake here in believing which  
 25 document -- which Ernst & Young audit this was.

190

1 I thought this was going to be the one that noted the  
 2 controls with regard to access to the Horizon back end  
 3 systems. I'm not sure this is the document that  
 4 I thought it was.  
 5 Q. So you think -- what, you think there is another  
 6 document that is relevant to the debate we are having,  
 7 do you?  
 8 A. Yes.  
 9 Q. What's that document?  
 10 A. Could I take a moment to find it?  
 11 Q. Yes, by all means. We are talking about  
 12 an Ernst & Young document?  
 13 A. I believe so, yes.  
 14 MR JUSTICE FRASER: Can we go back to page 7 because it  
 15 might actually be the right document and he is just  
 16 looking at the Fujitsu part that's attached.  
 17 {F/1041/7}, does that help you?  
 18 A. It could well do, my Lord. Could we go through?  
 19 MR JUSTICE FRASER: I'm not going to control what you look  
 20 at. If you want to look forward or back just ask the  
 21 operator to do it. Mr de Garr Robinson I just thought I  
 22 might help.  
 23 MR DE GARR ROBINSON: I'm much obliged to your Lordship.  
 24 A. Can you keep going forward please to the point where the  
 25 tables start please. {F/1041/10}. I don't think this

191

1 is the one that I was thinking it was.  
 2 Q. What I took you to was the service audits that Dr Worden  
 3 refers to at some length in his supplemental report and  
 4 which he refers to again in your joint statement?  
 5 A. Yes.  
 6 Q. I'm happy for you to tell me there are some other  
 7 documents which are relevant to the debate we are  
 8 having, but the fact that you thought I was going to  
 9 take you to some other documents doesn't really take  
 10 matters much further, does it?  
 11 A. Okay, I'm happy for you to take me wherever you want to  
 12 take me to.  
 13 MR JUSTICE FRASER: Can I just make a point generally  
 14 because I know you have only got another day.  
 15 Although Mr de Garr Robinson does say from time to  
 16 time "the debate we are having" and "the discussion we  
 17 are having", actually he is cross-examining you. So if  
 18 you just focus on his questions. If in order to answer  
 19 the question you refer to documents or there is some  
 20 wider sphere, well, of course that's understood, but it  
 21 is not a general debate.  
 22 A. Yes, my Lord.  
 23 MR JUSTICE FRASER: Is that clear?  
 24 A. Accepted.  
 25 MR JUSTICE FRASER: All right.

192

1 MR DE GARR ROBINSON: Thank you, my Lord. Let's now go to  
 2 control objective 13, it is headed "Remote Access". It  
 3 is at {F/1041/88}. To be clear I apprehend that what  
 4 this document means by remote access isn't exactly the  
 5 same as what I mean when I talk about remote access,  
 6 although there is some significant overlap.  
 7 A. Yes.  
 8 Q. Perhaps you could cast your eye down since you are such  
 9 a quick reader. Is it page 88? (Pause). So if you  
 10 could just cast your eye down those control objectives .  
 11 You will see on the right-hand side of the page "No  
 12 deviations noted"?  
 13 A. Yes.  
 14 Q. Ernst & Young gave Fujitsu a full , clean bill of health  
 15 on all the other control objectives , didn't it?  
 16 A. Yes. For context the remote access authorisation here  
 17 is the connection from the counter to the data centre.  
 18 Q. Yes, it is not entirely the same as what we are talking  
 19 about. But on all the objectives that are addressed in  
 20 this service audit, they cover issues that you have  
 21 raised but going much wider than remote access, don't  
 22 they? That is a slightly unfair question, let me be  
 23 clearer. Control objective 1 {F/1041/70}:  
 24 "Controls provide reasonable assurance that access  
 25 to data centres and facilities with computer equipment,

193

1 storage media and program. Documentation is restricted  
 2 to properly authorised individuals ."  
 3 {F/1041/71}  
 4 "Control Objective 2: Controls provide reasonable  
 5 assurance that computer equipment and facilities are  
 6 protected from damage by fire, flood and other  
 7 environmental hazards and maintenance agreements are in  
 8 place."  
 9 {F/1041/72}  
 10 "Control Objective 3: Controls provide reasonable  
 11 assurance that programs, files and datasets that have  
 12 been identified as requiring periodic backup are backed  
 13 up and retained."  
 14 {F/1041/73}  
 15 "Control Objective 4: Controls provide reasonable  
 16 assurance that processing is appropriately authorised  
 17 and scheduled and that deviations from scheduled  
 18 processing are identified and resolved."  
 19 All of these things contribute to robustness, don't  
 20 they, of the Horizon system?  
 21 A. They do, yes.  
 22 Q. {F/1041/74}  
 23 "Control objective 5: Controls provide reasonable  
 24 assurance that system availability performance and  
 25 capacity are routinely monitored to ensure potential

194

1 issues are captured and investigated ."  
 2 {F/1041/76}  
 3 "Control Objective 6: Controls provide reasonable  
 4 assurance that significant operations incidents are  
 5 adequately reported, tracked, monitored through  
 6 resolution and resolved timely."  
 7 That's quite an important one, isn't it, bearing in  
 8 mind the criticisms you make of the processes adopted by  
 9 Fujitsu and Post Office in relation to problems, would  
 10 you agree?  
 11 A. Yes, it is talking about the procedures and policies ,  
 12 yes.  
 13 Q. {F/1041/78}  
 14 "Control Objective: 7 Controls provide reasonable  
 15 assurances that networks are managed to contractual and  
 16 site requirements, monitored for availability and  
 17 response times and issues are identified , tracked and  
 18 resolved."  
 19 {F/1041/80}  
 20 "Control Objective 8: Controls provide reasonable  
 21 assurance that modifications to system software and  
 22 networks are authorised, tested, approved, properly  
 23 implemented and documented."  
 24 That is quite an important one in the context of  
 25 these proceedings, isn't it?

195

1 A. Yes.  
 2 Q. {F/1041/81}  
 3 "Control Objective 9: Controls provide reasonable  
 4 assurance that new or modified application software  
 5 development efforts are authorised tested, approved,  
 6 properly implemented and documented."  
 7 Again quite important in the context of these  
 8 proceedings.  
 9 We have already looked at control objective 10. If  
 10 we look at control objective 11 {F/1041/85}:  
 11 "Controls provide reasonable assurance that access  
 12 to databases, data files , and programs is restricted to  
 13 properly authorised individuals ."  
 14 That is quite important, isn't it?  
 15 A. It is and that's why I'm surprised that in 2011  
 16 Ernst & Young made the observations that they did in  
 17 another audit document.  
 18 Q. {F/1041/87}  
 19 "Control Objective 12: Controls provide reasonable  
 20 assurance that networks and system resources are  
 21 protected from external threats and access violations  
 22 are detected, reported and investigated ."  
 23 Now all of those are quite material to many of the  
 24 judgments you have made in the course of both your  
 25 reports about how the system was operated, about how its

196

1 robustness could be improved and so on, aren't they?  
 2 A. Yes.  
 3 Q. Now in the years 2012 all the way through to 2017,  
 4 Mr Coyne, only one other deviation was noted apart from  
 5 the one we have already gone to and that was in the 2016  
 6 service audit and for fairness I should take you to it.  
 7 It is at {F/1562/83}. I may have given the wrong  
 8 reference.  
 9 MR JUSTICE FRASER: We are going to 2015?  
 10 MR DE GARR ROBINSON: Let's hope I have got the right  
 11 reference.  
 12 If we could go to page {F/1562/83}. Yes.  
 13 "Control Objective 9: Controls provide reasonable  
 14 assurance that new or modified application software  
 15 development efforts are authorised tested, approved,  
 16 properly implemented and documented."  
 17 A. Yes.  
 18 Q. It is said that one POLSAP user could develop and  
 19 implement a change for software development and a user  
 20 should not be able to do both, do you see that?  
 21 A. Yes.  
 22 Q. This issue was flagged and resolved before the service  
 23 audit was published, do you see that?  
 24 A. Yes.  
 25 Q. There was only one user, there was no reported incident

197

1 in connection with this, yes?  
 2 A. Mm.  
 3 Q. And no recommendation for improvement, yes?  
 4 A. Yes.  
 5 Q. So subject to those two deviations over a five-year  
 6 period, no other deviations were noted in these service  
 7 audits and no recommendations for improvement were made?  
 8 A. No.  
 9 Q. Now, in your reports you attached importance to audits,  
 10 didn't you, saying that auditors are in a better  
 11 position than you and Dr Worden to evaluate the change  
 12 control processes, yes?  
 13 A. Yes.  
 14 Q. Do you stand by that?  
 15 A. Yes.  
 16 Q. Do you accept that in circumstances where you are making  
 17 serious criticisms of Post Offices' and Fujitsu's  
 18 processes over all or most of these control objectives,  
 19 it was really important to provide a balance to account  
 20 of where Post Office and Fujitsu stood?  
 21 A. The specific observations I made was user access and  
 22 change control. A lot of the things you have taken us  
 23 through there aren't necessarily about that.  
 24 Q. A lot of the things I have taken you through are  
 25 terribly about lots of things that you purported to

198

1 criticise Post Office for during the course of your two  
 2 reports, would you agree with that?  
 3 A. No. The majority of the criticism is about change  
 4 control and user access.  
 5 Q. Do you not think, Mr Coyne, that it would have been fair  
 6 for you to have had proper regard to the service audits  
 7 and to have mentioned them in your reports when deciding  
 8 to criticise Post Office and Fujitsu in the way that you  
 9 have?  
 10 A. It would have been helpful to provide an overview of  
 11 these, yes.  
 12 Q. My Lord, I wonder whether that's a convenient moment.  
 13 MR JUSTICE FRASER: I think so. Would you like to start at  
 14 10.15 am tomorrow?  
 15 MR DE GARR ROBINSON: I would love to start at 10.15.  
 16 MR JUSTICE FRASER: I think there may only be a couple of  
 17 other people in this court who share your exuberance but  
 18 luckily I'm one of them.  
 19 So Mr Coyne, I know you come from Preston but  
 20 I imagine you are staying in London, are you?  
 21 A. Yes. I am.  
 22 MR JUSTICE FRASER: So there's no problem with you coming  
 23 for 10.15 am and did the two of you discuss the  
 24 re-examination --  
 25 MR DE GARR ROBINSON: My Lord we did.

199

1 MR JUSTICE FRASER: Would you like to enlighten me or either  
 2 of you?  
 3 MR GREEN: My Lord, I'm going to confine myself to 5 to 10  
 4 minutes per day of cross-examination, so I said to my  
 5 learned friend if he is able to finish by 3.45 pm, but  
 6 we haven't factored in any questions from your Lordship.  
 7 MR JUSTICE FRASER: That's all right. So broadly 3.45 pm  
 8 more or less tomorrow. So 10.15 am tomorrow Mr Coyne.  
 9 Thank you all very much.  
 10 (4.30 pm)  
 11 (The court adjourned until 10.15 am on Friday,  
 12 7th June 2019)

200

1 INDEX  
2 MR JASON PETER COYNE (continued) .....1  
3 Cross-examination by MR DE GARR ROBINSON .....1  
 (continued)

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

201

202

<p><b>A</b></p> <p><b>abilities (3)</b> 5:22 73:9 145:3</p> <p><b>ability (6)</b> 18:22 45:20 75:1 77:3 118:10 180:2</p> <p><b>abilityfacility (2)</b> 1:17 34:15</p> <p><b>able (13)</b> 10:13 22:6 63:1 65:16 68:17 74:12 81:13 87:9,11 98:17 160:4 197:20 200:5</p> <p><b>above (7)</b> 5:24 66:18 68:1 97:24 110:25 144:18 159:7</p> <p><b>absolute (1)</b> 162:15</p> <p><b>absolutely (7)</b> 32:3 34:10 38:12 75:16 124:25 131:4,7</p> <p><b>abuse (1)</b> 6:3</p> <p><b>accept (70)</b> 6:17 12:18,21 13:13 29:23 31:24 38:13 41:2,13 47:17 53:9 54:11,15 55:17,19,20 57:7 58:20 59:2,8,16,23 60:2,4 61:1 64:13 67:10 68:5 70:11,12 71:5,10,12 80:10 82:7 84:10 85:11,16,19 90:3,4 92:6 94:3,5 96:1,8,13,16 97:11 98:25 99:12 108:21,22 113:6 114:1 119:12 122:18 142:13,25 143:1 155:6,16,22 170:16 177:19 178:18 181:10,19 190:15 198:16</p> <p><b>acceptable (1)</b> 81:12</p> <p><b>accepted (9)</b> 41:2 45:16 46:2 57:16,22 85:9 172:14 178:20 192:24</p> <p><b>accepting (2)</b> 68:17 176:22</p> <p><b>access (151)</b> 1:9,11,14 5:10,17 6:9,19,23 7:4 12:2 17:15,22,24 18:2,3,7 19:1,7,12,13,16,19,22 20:6,9,16 21:1,2,8,11,19,23,25 25:2,21 26:3,6,11,12,16,25 27:13,16,22 28:10,12,15,23 29:2,17,21,23 30:10,12,13,14,16 31:1,11,15,23,25 32:3,6 34:11,17,20,22 35:2,5,6,19,20,25 36:5,9 43:9,18,19,23 44:4,19 45:2,18,23 46:17,18 47:3,12 68:25 69:1 70:15 71:6 72:14,16 77:4,14,17 86:5 87:9 89:4,13,13 90:2 92:2 132:18 133:20 136:24 137:10 138:2,12,21 143:10 144:12,15 145:9,10,12</p>	<p>154:23 156:1 161:19 162:20 173:16 174:9,24 175:4 184:14,20,20 185:7,16 186:4,5,6 189:4,9 190:7,8,10,11 191:2 193:2,4,5,16,21,24 196:11,21 198:21 199:4</p> <p><b>accessed (1)</b> 48:21</p> <p><b>accessing (1)</b> 134:8</p> <p><b>accidentally (1)</b> 83:12</p> <p><b>accompanied (1)</b> 171:11</p> <p><b>accordance (2)</b> 25:24 144:11</p> <p><b>account (22)</b> 2:18 4:4 20:10 31:16 32:2,2 35:19 55:14 72:3,7,7,24,25 73:2,14 74:16 93:25 118:19,20 147:7 168:22 198:19</p> <p><b>accounting (35)</b> 3:4,17,18,20,24 4:2,9 5:11 7:3,14 12:19 16:24 17:16 19:2 25:15 36:14,25 37:2 38:18,25 39:14 41:3,5,9 49:6 67:3,7 69:5 111:15 134:18 149:12 155:4,21 161:1,3</p> <p><b>accounts (103)</b> 1:15,18,20 2:6,18 3:15,23 4:20,22 5:12 12:20 16:24 17:15,16,20 21:8 26:17,25 29:11,25 30:2,14,17 32:13 34:16 35:11 36:14 37:13,21 38:6,18,19,21 39:19 42:4 43:12,25 44:21 45:19 46:9 47:23 49:22,24 50:6 53:22 54:3,8,9,22,24 58:7 59:10 60:7,12 66:20,23 67:4,6,8 68:4,10,21 69:2,13 70:4,8 71:6 72:5 73:12,13,17 82:9 85:18 107:6,6 115:6 119:24 121:15 122:5,20,25 123:4 127:11 134:10 142:15 143:17 149:10,13,20 152:10 153:3,6,13,14 156:2 161:20,24 162:8 173:7,12 188:7 190:9,11</p> <p><b>accuracy (2)</b> 4:20 25:23</p> <p><b>accurate (1)</b> 23:5</p> <p><b>acha (3)</b> 150:4,17 153:20</p> <p><b>achieve (2)</b> 170:14 172:16</p> <p><b>achieved (1)</b> 31:8</p> <p><b>acknowledged (1)</b> 45:15</p> <p><b>acknowledgements (6)</b> 43:7,8,13 44:6,8,13</p> <p><b>acronym (1)</b> 48:15</p> <p><b>across (4)</b> 25:9 86:9 99:23 152:15</p>	<p><b>acted (1)</b> 75:19</p> <p><b>action (12)</b> 111:8 118:6 128:8 167:2,17 168:12 169:4 172:9 173:20 174:12 176:15 186:12</p> <p><b>actioned (1)</b> 129:6</p> <p><b>actions (7)</b> 5:25 7:10 15:21 77:7 163:9,13,16</p> <p><b>active (2)</b> 147:9,10</p> <p><b>activity (1)</b> 69:3</p> <p><b>actual (5)</b> 33:14 100:8 127:6 131:17 142:13</p> <p><b>actually (64)</b> 14:20 15:19 18:6 19:24 28:16 29:12 31:23 32:25 34:3,8 38:12 42:18 46:15 52:20 53:20 54:21 56:8 61:15 65:15 68:6,25 70:4 72:5 74:4,18 75:10 76:13 82:11,20 83:2 95:18 98:3 100:7 107:4 109:6 118:1,6 124:6,17 127:10 130:17 131:3 142:24 145:19 149:9,12,18 150:13 151:11,21 153:2,16 163:12 165:9 169:24 173:4 176:19,25 181:21,23 184:17,19 191:15 192:17</p> <p><b>add (1)</b> 145:1</p> <p><b>adding (4)</b> 14:10 26:18 64:17 96:5</p> <p><b>additional (5)</b> 92:3 94:2 99:17 176:7 186:18</p> <p><b>additionaldata (1)</b> 113:19</p> <p><b>address (7)</b> 27:3 45:24 63:22 70:10 98:19 173:25 174:13</p> <p><b>addressed (6)</b> 13:20 34:12 77:2 172:23 184:5 193:19</p> <p><b>addresses (1)</b> 151:5</p> <p><b>addressing (3)</b> 34:14 87:22 177:5</p> <p><b>adequate (2)</b> 182:9,12</p> <p><b>adequately (1)</b> 195:5</p> <p><b>adjourned (1)</b> 200:11</p> <p><b>adjournment (2)</b> 101:24 102:22</p> <p><b>adjustment (2)</b> 20:19 27:8</p> <p><b>adjustments (2)</b> 4:24 55:21</p> <p><b>admin (1)</b> 80:13</p> <p><b>administration (1)</b> 145:4</p> <p><b>admitted (1)</b> 137:20</p> <p><b>adopt (2)</b> 41:7,8</p> <p><b>adopted (5)</b> 28:11,12 94:6 171:23 195:8</p> <p><b>adopting (1)</b> 171:17</p> <p><b>advance (1)</b> 135:18</p> <p><b>advanced (1)</b> 20:7 183:16</p> <p><b>adversely (3)</b> 16:3 29:24 32:3</p> <p><b>advised (1)</b> 110:17</p>	<p><b>affect (12)</b> 1:20 4:8,14 16:3 19:2 21:8 25:11,14 26:25 38:14 122:4,25</p> <p><b>affected (6)</b> 18:14 29:24 32:3 43:12 60:12 149:10</p> <p><b>affecting (6)</b> 19:13 26:16 30:13,14 156:2 161:20</p> <p><b>affects (2)</b> 29:24 123:1</p> <p><b>affirm (1)</b> 59:4</p> <p><b>afraid (2)</b> 63:13 174:19</p> <p><b>after (28)</b> 8:2,14 9:21 12:15 14:12 23:8 24:1 34:9 81:14 92:19 99:8,20 109:15 112:9 122:12,14 125:18 126:21 128:17 129:15 132:1 135:17 140:16,23 141:16 174:8 190:9,11</p> <p><b>afternoon (2)</b> 102:24,25</p> <p><b>afterwards (2)</b> 80:12 103:16</p> <p><b>again (26)</b> 1:7 13:14 16:1 30:21 39:13 42:3,20 47:17 55:20 60:21 66:7 77:16 78:18 85:16 86:16 93:20 110:13 137:15 143:6 148:19 151:18 157:24 175:14 183:18 192:4 196:7</p> <p><b>against (8)</b> 4:11 6:2 23:4 70:24 98:6 146:17 181:16 189:15</p> <p><b>aggregate (3)</b> 4:15 126:14,20</p> <p><b>aggregation (8)</b> 2:19,24 3:9,13 4:15 5:6 160:9,18</p> <p><b>ago (3)</b> 163:5 170:9 182:24</p> <p><b>agree (78)</b> 2:14 5:9 9:12,15 13:25 14:5 15:23 19:20 27:17 28:19 29:13 32:6,9 33:15 35:20 39:13 41:10,14,21 42:1,19 44:11 50:22 53:16 60:18 77:12 78:3 96:11 106:7 107:23 108:12 114:23 118:8 122:7,22,23 127:2 130:2 140:1,14 144:11 145:3 149:7,22 151:19,24 152:12 153:3,8,15,16 154:23 155:8 159:4 160:23 161:5 164:13 168:23 169:3,15 170:3 172:9,10,19 174:11,14 177:25 179:5 182:6,9,16 184:22 186:18 188:4 189:2,5 195:10 199:2</p> <p><b>agreeable (1)</b> 61:24</p> <p><b>agreed (21)</b> 9:17,19 14:20 27:23 28:21 46:18 72:1 77:22 107:22 111:5 128:1 130:5 139:8,12 141:15</p>	<p>143:15 152:4 178:6 182:7 184:16,23</p> <p><b>agreements (1)</b> 194:7</p> <p><b>agrees (1)</b> 136:18</p> <p><b>aha (1)</b> 129:22</p> <p><b>aimed (1)</b> 86:24</p> <p><b>aka (1)</b> 79:22</p> <p><b>allow (7)</b> 36:23 42:8,9 47:23 94:2 147:19 149:1</p> <p><b>allowed (2)</b> 6:13 7:9</p> <p><b>allowing (1)</b> 80:16</p> <p><b>allows (4)</b> 16:7 48:21 118:24 160:17</p> <p><b>almost (2)</b> 85:3 152:2</p> <p><b>already (30)</b> 8:19 10:18 16:15 19:10 25:25 42:4 48:1 57:22 59:9 77:22 85:9 89:21 90:15 100:11 107:22 112:10 137:14 138:8,10 140:9 149:12 158:7 159:12 163:18 168:4 178:19 182:9,12 196:9 197:5</p> <p><b>also (27)</b> 2:16 8:1 12:4 14:18 17:10 25:20 38:22 41:14 46:17 48:5 49:15 50:22 75:3 77:5 86:12 115:22 123:14 124:24 131:11 163:3 178:8,9 182:24 185:2,24 187:22 188:1</p> <p><b>alter (2)</b> 72:6 145:15</p> <p><b>alteration (1)</b> 122:20</p> <p><b>altered (1)</b> 59:20</p> <p><b>alternate (1)</b> 92:15</p> <p><b>alternative (1)</b> 55:16</p> <p><b>although (7)</b> 13:10 86:24 87:24 117:1 157:17 192:15 193:6</p> <p><b>always (17)</b> 6:18 20:23 26:21 28:17 54:19 83:19 89:20 92:12 100:4 107:24 114:3 149:25 162:10,13,15 172:15 178:21</p> <p><b>amend (1)</b> 120:13</p> <p><b>amending (1)</b> 79:21</p> <p><b>amount (2)</b> 112:20 114:12</p> <p><b>amounts (1)</b> 46:6</p> <p><b>analyse (1)</b> 22:15</p> <p><b>analysis (2)</b> 16:19 25:1</p> <p><b>andor (2)</b> 1:14,16</p> <p><b>andy (4)</b> 106:10 110:13 120:21 124:19</p> <p><b>anne (8)</b> 110:7 113:15 127:18 129:13 150:2 152:18 157:24 159:7</p> <p><b>annual (3)</b> 6:22 7:2 26:10</p> <p><b>anomalies (2)</b> 96:16,18</p> <p><b>another (19)</b> 12:22 33:15 57:8 84:1,21 86:5 87:24 117:5 137:11 143:18 168:15 169:22,22,23,23 187:17 191:5 192:14 196:17</p> <p><b>answer (23)</b> 2:4 16:16,17 17:14 29:2 38:14 44:17 46:24</p>	<p>47:8 52:20 69:10 90:4,8 95:13 100:14,18 116:12 135:7 137:7 173:4 176:3,9 192:18</p> <p><b>answered (3)</b> 9:24 31:3 47:2</p> <p><b>answering (3)</b> 9:6 15:3 91:3</p> <p><b>answers (2)</b> 17:9 100:17</p> <p><b>antepenultimate (1)</b> 125:3</p> <p><b>anticipated (1)</b> 100:25</p> <p><b>anxious (3)</b> 95:11 138:10,11</p> <p><b>anyone (9)</b> 6:6,8 9:25 75:25 117:14,17 134:7 135:18 139:20</p> <p><b>anything (12)</b> 32:19 63:8,20 80:6 82:17 83:7,22 102:19 158:17 172:22 186:1,21</p> <p><b>anyway (2)</b> 113:23 148:25</p> <p><b>anywhere (1)</b> 110:22</p> <p><b>apart (2)</b> 63:8 197:4</p> <p><b>apologise (8)</b> 23:15 86:11 109:5 110:13 150:13 172:5 174:21 180:13</p> <p><b>apparent (2)</b> 53:11 103:25</p> <p><b>appear (11)</b> 9:20,22 13:10 26:12 28:19 57:11 58:21 83:1 120:11 166:13,14</p> <p><b>appeared (1)</b> 129:16</p> <p><b>appears (9)</b> 106:14 108:13 112:11 124:23 143:25 157:20 166:2,6 179:7</p> <p><b>application (3)</b> 167:22 196:4 197:14</p> <p><b>applications (2)</b> 188:15 190:7</p> <p><b>applied (8)</b> 12:17,21 13:9 28:8 117:20 119:17 162:25 184:21</p> <p><b>apply (1)</b> 119:18</p> <p><b>applying (1)</b> 55:5</p> <p><b>appointors (1)</b> 172:18</p> <p><b>appreciate (5)</b> 10:16 40:17 100:25 127:3 130:7</p> <p><b>apprehend (2)</b> 78:24 193:3</p> <p><b>apprehension (1)</b> 26:22</p> <p><b>approach (11)</b> 13:8 28:11 43:15 68:5 96:13 174:5 181:15 183:22,24 186:11 189:1</p> <p><b>approaching (1)</b> 52:20</p> <p><b>appropriate (9)</b> 162:21 178:13 183:14 184:1 185:23 186:10,16 189:1,1</p> <p><b>appropriately (1)</b> 194:16</p> <p><b>approvals (1)</b> 169:20</p> <p><b>approved (7)</b> 106:2 111:6 123:9 180:25 195:22 196:5 197:15</p>	<p><b>approving (1)</b> 12:23</p> <p><b>appsup (2)</b> 144:23 163:15</p> <p><b>april (5)</b> 156:20 157:14 158:1 159:2 188:16</p> <p><b>area (2)</b> 136:23 187:17</p> <p><b>areas (2)</b> 168:21 187:3</p> <p><b>arent (17)</b> 6:3,7 11:25 12:2 20:13 22:20 40:25 44:4 67:23 111:14 118:21 125:4 143:23 147:9 188:22 197:1 198:23</p> <p><b>arise (6)</b> 13:22 15:6 151:6,9 183:17 184:19</p> <p><b>arisen (3)</b> 109:2,7 177:11</p> <p><b>arises (1)</b> 108:3</p> <p><b>arising (1)</b> 9:14</p> <p><b>armed (1)</b> 135:16</p> <p><b>arose (2)</b> 102:18 183:16</p> <p><b>around (7)</b> 11:20 15:17 48:22 72:3 80:7 134:14 165:19</p> <p><b>arrangements (1)</b> 102:8</p> <p><b>arrived (3)</b> 9:19 44:9 55:23</p> <p><b>ascertain (2)</b> 59:1 105:17</p> <p><b>ascertaining (1)</b> 17:14</p> <p><b>aside (3)</b> 10:25 33:25 35:18</p> <p><b>ask (32)</b> 1:11 6:24 8:15 10:8,13,21 16:12,15 33:17 53:6 67:13 71:4 72:18 76:19 92:23 96:18 98:17 100:4 103:5 114:13 132:24 140:5 142:9 146:5 163:21,23 174:17 186:1,8,8,9 191:20</p> <p><b>asked (14)</b> 9:23 14:5 27:5,21 52:21 57:6 63:5 69:23 90:5 91:4 95:17 96:20 125:21 186:9</p> <p><b>asking (4)</b> 100:11 134:6 152:22 185:18</p> <p><b>aspect (5)</b> 16:18 48:12 49:20 86:5 91:21</p> <p><b>aspects (5)</b> 23:19 48:24 51:3 187:12,13</p> <p><b>assembling (1)</b> 39:21</p> <p><b>assert (1)</b> 14:21</p> <p><b>assertion (3)</b> 167:7 179:10,11</p> <p><b>assertions (1)</b> 14:19</p> <p><b>assessment (5)</b> 18:8 19:6 21:22 22:6 185:22</p> <p><b>assist (2)</b> 16:18 44:12</p> <p><b>assume (3)</b> 118:21 172:1,13</p> <p><b>assumed (1)</b> 102:16</p> <p><b>assumption (2)</b> 172:3,6</p> <p><b>assurance (13)</b> 188:17 189:9 193:24 194:5,11,16,24 195:4,21 196:4,11,20 197:14</p> <p><b>assurances (1)</b> 195:15</p> <p><b>attached (2)</b> 191:16 198:9</p>
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attempt (3) 21:10 22:24 157:25 attempting (1) 187:3 attempts (6) 23:19 36:20,24 190:8,10,11 attention (1) 110:18 attitude (1) 162:19 attributes (2) 64:17 116:18 audit (37) 30:22 94:3 139:9,15,18,22 165:22 171:5,12,14,16 174:18 175:1,2,13,16,17,25 177:10 178:8,9 179:8,10,11,13 180:4,7 181:16 185:2,25 186:2 187:1 190:25 193:20 196:17 197:6,23 audited (1) 139:20 auditor (1) 172:11 auditors (12) 164:12 172:18 174:4,7,13,13,16 176:20 177:17 178:21 188:17 198:10 audits (13) 174:2 176:16 187:19,21,22 188:1,4,5,9 192:2 198:7,9 199:6 authorisation (4) 7:13 13:11 123:17 193:16 authorisations (1) 7:5 authorised (11) 13:1 113:21 120:13 180:24 189:11 194:2,16 195:22 196:5,13 197:15 automated (8) 78:3,4 108:1,10,24 109:10 152:14 180:3 automatic (15) 33:6 34:1 42:9,17,23 81:21 104:14 105:10 132:22 152:16 160:18 171:18,23 183:6,10 automatically (8) 34:5 80:17,20 94:7 105:5 107:24 148:15 170:6 availability (2) 194:24 195:16 available (5) 16:15 29:20 51:11 55:17 102:10 avoid (1) 113:23 avoidance (1) 113:25 aware (48) 7:12 9:1,4,7 22:18 24:4,15 25:4,6 26:2 30:15 31:22 33:20,22 34:20,23 40:2 47:22 77:17 82:17 84:11 85:2 86:7 88:17 104:1 110:16,21 115:25 133:4,9,20 134:18 136:22 137:8,10,21,24 140:17,19 144:7 145:7 149:21 156:9 170:5 172:21 176:11 177:14 182:19 away (2) 76:14 148:22	b (1) 45:14 back (54) 5:3 7:6 11:23 28:24 31:3 32:24 34:2 36:2 42:25 47:16,25 73:20 74:1,18 76:19 82:3 86:2 88:3 91:1,9,25 93:21 99:17,22 101:23 102:20 117:17 127:17 132:6,9,22 133:24,25 137:5,6,14,15 138:16 143:9 148:14,18 152:20 154:2 159:14 164:24 172:4 173:2 175:11,18 179:9 190:3 191:2,14,20 backed (1) 194:12 backing (1) 127:16 backup (1) 194:12 balance (18) 3:5,6 4:9,16,17 5:6,7 37:7 41:6 112:6 116:5 118:25 155:9,11,12,19 159:20 198:19 balanced (3) 68:23 115:18 185:22 balancing (28) 39:25 40:3,8,14,16,18,19 41:1,3,11,15,18,19,22 97:19 116:6 133:8 138:24 139:2,2 141:1 143:2,24 144:3,18 158:16,24,25 ballpark (1) 11:18 bank (4) 73:2 74:4,9,16 based (7) 2:1 3:9 47:8 65:18 181:12,15,23 basic (5) 35:22 64:25 83:6 99:24 134:12 basically (1) 116:16 basis (9) 36:6 117:5 120:4 166:5 179:3,3 183:5 184:3 186:12 basket (1) 147:4 bau (1) 173:14 bdc (2) 112:8 128:16 bearing (7) 14:1 26:9 28:21 47:18 85:11 102:1 195:7 bears (1) 126:25 become (4) 4:21 9:1 24:14 53:11 becomes (3) 54:9 147:1,3 before (39) 3:14 11:2,19 13:18 14:5 24:20 43:20 47:4 52:7 62:2 64:5 66:1 68:3 74:3 80:22 82:6 83:9 98:12 100:19 103:23 110:16 113:16 115:18 116:18 118:1 122:14 123:10 124:23,24 125:4,21 128:18 130:7 136:13 156:4 166:23 175:12 180:14 197:22 beforehand (1) 8:18 beg (1) 130:23 beginning (3) 3:2 144:13 160:11 being (79) 5:5 11:7 18:3,7,8,14,17 23:10 28:12 29:22,24 30:9	31:16,25 32:2 33:14 36:5 39:17 50:19 51:19,22 54:8,20 55:13 57:15 60:24 63:4 64:22 65:4 67:1,2 68:16,17,20 69:20,21,23,24 70:25 71:19 72:21,22,23 73:1 74:25 82:23 87:23 95:15,17 96:3 106:25 107:19 109:23 120:8,16,17 121:11 125:25 127:6 131:22 133:4 134:15 136:8 142:18 150:14 157:1 160:14 162:19,20 163:9,13 164:10 168:21 169:25 174:12 175:15,17 182:5 184:10 beings (1) 53:10 believe (35) 6:8,8 9:24 11:13 13:16 14:3 15:2 20:6 57:9 61:10,18 62:10 81:5 82:3 85:15,23 87:25 92:6,17 94:17 98:11 104:3 112:18 114:16 124:16 129:3 131:20,24 135:5 150:6 156:11 171:8 172:6 188:20 191:13 believed (1) 108:7 believing (1) 190:24 bell (7) 57:1,2 140:19,21 148:23 171:19 190:23 belong (1) 71:18 below (2) 138:25 166:3 benchmark (1) 189:15 benchmarked (1) 98:5 best (4) 100:7 103:21 110:17 174:12 better (1) 198:10 between (20) 15:10 19:4 38:9 42:7 51:18 54:24 56:20 57:24 68:25 69:7,12 70:3 83:17 100:16 101:13 111:15 115:23 116:1 127:14 128:18 big (3) 61:17 81:7 145:7 bill (6) 73:1,24 74:18,20 77:12 193:14 billions (1) 66:10 bit (3) 75:12 125:19 150:12 blackburn (1) 112:10 blah (3) 126:7,7,7 blame (1) 78:23 blaming (1) 95:4 blanket (4) 6:22 7:2,5,23 blindingly (1) 54:17 block (1) 149:1 blocked (1) 160:19 blue (1) 125:2 blurred (1) 36:4 boring (1) 36:7 borrow (1) 80:2 both (21) 22:18 38:3 42:16 46:16 49:3 58:20 70:2 86:23 99:6	111:20 115:14 123:21 128:10 131:16 135:18 143:11 154:23 160:4 163:20 196:24 197:20 bottom (5) 110:12 113:15 143:10 157:22 174:23 bound (1) 75:4 box (5) 13:11 19:24 60:11 104:17 157:3 boxes (3) 106:1 124:11 128:23 bp (1) 158:8 branch (185) 1:15,18,20,21 2:6,18,18 3:3,14 4:20 5:11 7:14 12:20 16:24 17:15,16,20 19:2,13 20:10,15,17,20 21:2,7,8 22:3 26:16,25 29:11,24 30:1,13 32:2 33:1 34:16 35:11 36:25 37:1 38:18,19,21 42:4 43:12,24,25 44:21,23 45:19 46:15 47:23 49:6,21,24 50:6 53:2,22 54:3,8,9,21 56:15,21,23 58:7 59:9 60:1,6,12 66:20,23 67:3,4,6,8 68:4,9,20 69:2,5,13,17,18,19,21,25 70:4,8,24,24 71:6,7,14,17,19 72:3,22 73:12,13,17,25 74:19 77:20 82:4,8 85:18 86:6 90:15,17,17,19 92:4,21 94:15 104:19 107:13 108:13 110:10,14,16,17 111:10,23 112:5,11 115:6,14,19,22,23,24 116:1,5 117:10,15 119:19,24 120:14,22 121:3,15 122:5,6,17,20,25 123:1 126:7 127:11,14 128:10,15 134:10 140:12 141:25 142:15 143:16 148:7,18 149:2,10,13,20 153:3,6 155:15 156:2,21 157:5,10,15 158:13,24 159:5,13,25 160:7,10,16 161:1,2,20,24 162:7 branches (15) 7:4 21:1,5,16,18 24:5,14,17 25:1,15 70:13,17,21 71:7 156:25 branches (11) 20:10 30:17 37:13,21 38:6 39:19 59:24 111:15 116:6 134:8 136:25 brdb (25) 5:15 12:20 32:17 37:13,15,17,22 48:2 49:3,5,7 57:18,25 67:2 69:2 74:2 107:5 139:5 140:3,12 142:18 145:22 146:25 147:5 159:5	brdbsuopeningbalance (1) 158:8 break (9) 23:8 24:1 62:1 63:9 64:2,6 101:22 153:23 154:8 briefly (3) 33:3 63:23 101:12 bring (1) 85:6 bringing (1) 133:23 brings (1) 99:17 british (1) 73:2 broached (1) 9:16 broadly (1) 200:7 broken (1) 156:5 broken (1) 78:6 brought (3) 52:13 137:14 138:4 bug (1) 150:25 bugs (4) 150:21 151:12,13 187:4 build (1) 4:15 building (1) 81:7 bulk (4) 64:8,19,24 65:2 bullet (5) 132:16 144:3,5,13,17 bundle (9) 1:12 45:8,9 63:7 66:17 71:24 77:15 102:9 153:21 bundles (3) 13:3 63:14 188:9 burden (1) 95:10 business (11) 6:16 70:22,23,25 71:13,16,18,19 96:9 173:15 184:22 button (1) 47:23	31:12 36:7 37:6 122:22 133:10 137:7 careless (1) 162:18 carrying (1) 168:7 cases (8) 7:20 19:11 31:23 54:18 60:3 93:7 97:23 153:11 cash (2) 158:9 175:7 cast (2) 193:8,10 casually (1) 25:22 categories (1) 11:24 caught (2) 76:15 97:3 cause (2) 115:4 145:24 caused (11) 50:16 88:5 103:18 111:2 112:15 113:4 121:2,2,3 127:12,23 causes (1) 33:8 causing (1) 85:17 caution (1) 23:4 centralisation (1) 169:20 centre (3) 157:7 175:7 193:17 centres (1) 193:25 certain (7) 6:13 8:2 32:18 70:7 101:2 141:15 146:10 challenge (2) 98:23,24 chambers (10) 110:7 113:15 114:7 127:18 129:13 131:25 150:2,17 152:18 157:24 chance (5) 32:1,4,5 58:18 60:10 chances (16) 29:23 31:15,24 52:21 54:19,24 55:6,8,12,15,17 59:3,6,13 60:7 85:17 change (101) 3:17,20 4:7 7:13 11:6 12:23 13:5 17:16 18:8,9,14,17,19 28:7,17 29:22 44:21,24 49:19,21 50:1,12 51:23 52:15,21 53:14,17 54:6 57:19,23 58:15 69:19 72:24 73:21 80:6,15 82:10,12,23 83:3,6,10,22,23,24 84:5,7 105:19,20,21,23 112:25 113:1 115:17 117:20 118:1 119:18 121:7,11,11,17,25 122:3,5,23,24 123:4,18,20 127:14,15 129:25 134:2,11,11 145:24 146:3 149:11 153:2,5 160:15,24,25 164:1,5,8 165:15 168:16 169:8,11,19,20 170:2 180:18 181:13 183:14 187:14 197:19 198:11,22 199:3 changed (13) 5:2 43:21 51:15 56:11 65:1 76:24 81:25 83:1,9 84:3 129:7 134:19 136:10	changes (61) 4:14 6:19 7:3,20 12:5,16,18,21 25:23 49:23 53:10,24 57:3 61:2,3 64:8,11,13,14,16,16,18,24 65:2,4 66:22 67:1,1,22 68:20 69:12,13,15,17,20 72:6 76:7 81:3 82:15,21 96:9,14 123:22 129:10 130:3 132:2 141:15,16 155:21 162:7 170:6 177:18 180:23 181:2,4,7,15 182:18,19,21 183:4 changing (6) 70:4,5 73:12,14 113:7 134:13 characterisation (1) 32:10 characterises (1) 97:11 characterising (1) 23:6 characteristics (3) 22:25 64:16 98:6 characters (1) 39:21 check (6) 29:22 82:1 93:15 101:14 172:4 179:13 checked (2) 38:21 183:4 checking (1) 51:11 checksstatements (1) 189:17 choose (5) 19:6 21:16 22:2 179:2 186:20 chose (13) 166:2,6,10,15 167:1,9,16 168:11 169:4 170:15 177:6 178:3 186:1 chosen (4) 172:9 176:15 178:14 186:12 chronology (1) 130:10 circumstances (14) 16:20 28:6,10 31:22 51:14 58:19 59:25 60:4 75:15 79:2 95:6 118:22 145:19 198:16 ciso (1) 168:21 cited (1) 103:8 claimant (5) 22:25 24:5,14,17,24 claimants (4) 22:21 23:19,20 24:19 claims (1) 16:14 clarity (1) 143:8 clean (1) 193:14 clear (24) 2:6 24:18 28:6 40:7,13,24 41:9 63:4 68:24 69:6 70:11 72:13 86:23 103:11 134:5,15,16 137:16 142:20,24 148:12 168:23 192:23 193:3 clearer (1) 193:23 clearly (1) 162:18 clerk (1) 148:21 clever (2) 74:6 150:12 client (15) 51:18 52:5 53:2 54:3 55:14,14,24 58:12,16,18,25 59:7,9 60:7 72:8 clients (2) 49:18 53:23 close (2) 96:10 180:7
<b>C</b>						
c (1) 46:3 c111 (1) 1:12 c113 (2) 1:13 17:3 calculation (2) 3:4,9 call (17) 29:13 34:17 77:14 88:25 89:3,6 90:12,21,25 91:12,14 104:5 105:15 106:20 139:2 152:17 189:13 called (4) 38:23 48:13 81:25 90:9 calls (3) 30:7 32:8 39:25 came (5) 135:16 171:3,5 180:15 183:13 cancel (2) 113:8 157:18 cancelled (1) 112:5 cannot (1) 154:16 cant (18) 16:14 18:11 19:22,23 69:19 70:21 71:6 107:9 110:22 132:5 144:11,14 148:15 152:2 158:24 182:12,13,15 canvassing (1) 9:13 capabilities (1) 68:2 capable (3) 19:10,14,17 capacity (1) 194:25 capture (1) 99:13 captured (1) 195:1 card (2) 79:22 80:1 care (1) 162:12 careful (5) 16:1 31:14 37:16 85:14 162:10 carefully (11) 16:21 25:20,24 26:21 29:22						
<b>B</b>						

<p>closely (2) 49:1 183:16          closing (1) 3:5          coconuts (2) 187:7,9          code (10) 19:24          20:11,21 22:17 70:24          72:7,24 73:14 82:25          104:19          codes (17) 19:14 21:17          22:2,3,5,9,15,18,20          24:5,8,10,13,20,24          25:6,9          coherence (3) 53:21          54:23 57:24          colleague (1) 12:22          colleagues (1) 96:20          column (9) 167:25          168:17 169:9,10,17          175:9 176:2 180:17          189:24          combine (1) 66:4          combining (1) 59:13          come (14) 2:5 32:20          33:2,17 101:23 102:20          112:21 131:5,15          144:14 154:2 171:8          172:4 199:19          comes (6) 8:16 10:11          61:13 81:7 104:9          185:3          coming (2) 55:22          199:22          command (5) 82:3          99:21 114:14 146:1          152:19          commands (1) 84:14          commenced (2) 168:4          169:18          comment (9) 94:2          117:8 166:23 168:1,18          172:25 173:8 181:9          186:6          comments (5) 96:5          117:12 120:20 126:6          185:13          committed (2) 135:20          147:5          committee (9) 163:4,19          170:9,24 177:2          181:17,18 182:23          183:11          common (1) 144:25          commonsense (2)          55:5,20          communicating (1)          183:3          communication (2)          173:13 182:21          company (1) 182:17          compared (8) 30:1          51:10,19 52:5 53:1,22          58:11 161:3          comparison (4) 39:2          61:5 65:13 165:5          complete (7) 10:11 37:5          71:15 79:7 157:15          175:10 176:4          completed (6) 8:14          11:19 36:19 147:13,14          154:17          completely (3) 69:3,4          75:15          completeness (1) 79:2          complex (2) 21:9</p>	<p>145:23          compliance (6)          163:3,18 170:24 177:1          181:18 183:10          computer (2) 193:25          194:5          computing (1) 189:10          conceivable (1) 69:22          conceive (1) 16:18          concept (2) 38:13          146:21          concepts (1) 137:17          concern (3) 4:4 116:6          150:21          concerned (16)          4:13,20,24 5:5 20:17          23:9 24:17 44:5 64:24          90:3 111:14 121:23,25          123:17 126:22 153:7          concerns (1) 102:1          conclude (1) 115:4          condition (1) 52:7          conduct (2) 17:24 95:5          conducted (1) 118:9          conducting (1) 70:22          conducts (1) 86:25          confident (2) 21:24          184:10          configuration (2) 2:2          38:23          configured (1) 183:13          confine (1) 200:3          confirm (4) 21:25 132:5          157:19 158:3          confirmed (2) 13:7 99:8          conflated (1) 39:9          confused (2) 89:9 186:3          connect (1) 157:6          connection (2) 193:17          198:1          connote (1) 169:13          connotes (1) 169:14          conscious (4)          186:21,22,25 187:1          consecutive (1) 190:9          consent (8) 1:23 6:18          7:2,21,23 12:1 120:16          162:21          consequence (1) 112:12          consequences (5) 70:6          117:23 118:17,20          119:21          consider (5) 46:5 72:4          77:7 98:15 151:12          considerable (2) 14:21          24:6          considered (6) 13:19          98:14 152:18 170:23          177:1 181:14          considering (1) 184:15          consistent (8) 13:3          20:23 35:21 54:3,7          96:13 117:11 178:16          constantly (1) 146:24          constitute (4) 37:12          44:18 45:1 122:5          constituted (3)          134:17,17 149:1          constitutes (1) 67:3          constituting (1) 47:12          consultation (1) 153:12          contact (1) 110:23          contain (10) 5:18 16:13</p>	<p>37:19 73:18 107:6          115:1 161:9,11          172:1,2          contained (8) 2:17          16:24 36:13 37:18          153:3,9 170:25 186:24          containing (3) 37:25          38:3,4          contains (4) 14:15,18          33:8 80:13          contents (1) 134:3          context (7) 22:19 85:24          89:19 189:5 193:16          195:24 196:7          contingencies (1) 70:7          continue (2) 10:25          155:1          continued (4) 1:3,4          201:2,3          contractual (1) 195:15          contribute (1) 194:19          control (46) 15:22          32:18 162:25 164:17          165:5 173:16 175:6          179:17 180:1,18,22,23          181:1,4,8 184:20,20          187:3,14 188:21          189:2,4,6,8 190:23          191:19 193:2,10,15,23          194:4,10,15,23          195:3,14,20          196:3,9,10,19 197:13          198:12,18,22 199:4          controls (34) 5:24          6:1,2,5 12:17 14:1          15:11,12,13,17,21          16:2,6 72:3 163:8          175:4 177:17          179:22,24 180:3 189:8          191:2 193:24          194:4,10,15,23          195:3,14,20          196:3,11,19 197:13          199:12          convenient (5) 61:21          62:25 100:21 113:25          199:12          conversation (2) 2:15          144:13          conversion (1) 126:15          conveys (1) 67:10          cool (1) 62:16          copies (4) 32:24 39:2          49:9 79:15          copy (16) 42:24 45:9          52:13 63:12,14 77:20          78:5 79:12 83:14          88:3,20 102:10 117:20          118:4,13 119:19          correct (44) 2:20 3:15          19:2 27:21 32:5,10          35:3 50:5 51:12          53:8,11 57:18 58:7          68:11 72:5 89:13          92:10 107:25          109:18,19 112:3          113:13,14 115:6 116:7          121:12 122:1 131:19          139:16,19 140:3          142:6,25 143:17          147:22 149:3,13          156:10 158:25 160:4          164:21 165:13 168:13          172:7</p>	<p>corrected (11) 27:6          103:14 106:20          111:3,22 124:20 125:9          127:24 128:14 131:18          174:10          correcting (1) 115:24          correction (33) 20:19          27:2,8 28:9,11          40:4,10,21          41:12,16,24 50:9,19          51:24 52:9,10,11          56:13 57:21 59:14          60:13,19 105:20          112:9,12 122:10          128:17,22 140:2,17          141:17 142:3,14          corrections (9)          43:6,8,13,22 44:5,8,13          55:23 56:3          corrective (4) 111:8,21          128:8,11          correctly (5) 60:6,7          97:11 122:8 131:13          correspond (1) 22:3          correspondence (8)          92:7,13,20,21 93:6          94:11,20,23          corresponding (2) 20:25          115:13          cost (2) 183:2,11          couldnt (7) 21:13,15,19          87:19,21 88:1 157:10          council (1) 75:18          counsel (6) 10:4,5,6,7          86:25 101:13          count (1) 36:9          counter (43) 33:4,15          36:20 69:18 78:7          79:7,10,17,19,21          82:25 83:2          84:1,2,21,23 92:9          94:8,12,14,15,18,22,24          96:23 97:17,21 107:14          111:2 115:18 127:23          136:9 146:24          147:11,19          148:10,11,21,22          151:18 152:20 158:5          193:17          countermeasures (5)          105:8 146:17 165:23          166:2,7          counters (3) 33:13 79:8          148:8          couple (12) 11:5 27:3          61:23,25 62:3 74:22          82:25 158:4 163:4          170:9 182:24 199:16          course (17) 4:21 35:15          45:23 60:10,13 64:15          74:17 89:3 100:12          132:23 141:10 153:19          172:11 184:13 192:20          196:24 199:1          cover (1) 193:20          covered (6) 91:22,24          123:21 143:25 166:18          188:1          covers (3) 122:16 150:1          161:23          coyne (90) 1:3,7 7:1          8:12 9:10 10:1,21          11:24 13:14 14:11</p>	<p>16:12 18:13 20:8,13          23:1 24:3 25:7          27:11,23 35:7 41:20          43:16 44:25 45:17          50:22 54:15 55:11          56:1 59:1 63:2 64:4          67:21 68:11 69:19          70:1 86:6 89:9 93:18          95:5 96:18 100:10          102:3,10,24 108:11          118:15 119:16 121:15          122:21 125:13,21          129:24 134:1 135:16          136:12 137:16 142:23          143:20 144:2 150:13          151:19 152:22 154:10          161:13 166:14 167:13          170:7,21,23 174:11,20          176:9 177:13,21          178:25 180:8,13          182:20 183:25 184:24          186:1,7,22 187:5          189:21 197:4 199:5,19          200:8 201:2          coynes (1) 47:7          crc (2) 80:11 82:1          create (7) 3:23 51:15          59:3,4 76:8 116:25          141:19          created (20) 7:18 8:3          9:8 10:20 15:14 40:5          42:24 46:14,15 64:22          69:24,25 89:1          109:13,15,17          130:18,18,20 161:24          creates (4) 29:25 82:1          109:20,24          creating (3) 30:17          39:14 154:20          creation (1) 121:13          credence (2) 48:4 188:2          crept (1) 158:20          criminal (5) 72:20          74:6,24,25 75:3          criminals (1) 77:11          critical (4) 6:23          7:10,20,24          criticise (4) 41:20          186:10 199:1,8          criticism (10) 81:7          95:13 142:23          177:22,24 178:2 179:2          184:18,19 199:3          criticisms (3) 162:24          195:8 198:17          crossexamination (10)          1:4 11:1 13:8,18 23:25          87:1 95:6 187:17          200:4 201:3          crossexamine (1) 35:1          crossexamined (2)          86:14 127:6          crossexamining (3) 10:4          102:3 192:17          curious (2) 43:15          135:19          current (2) 167:6          169:11          currently (6) 107:12          134:10 171:19          175:8,22 177:4          customer (7) 36:23          72:22 74:17 106:15,16</p>	<p>110:23 182:19          cut (1) 74:20          cutoff (2) 13:23 14:8          D          d1 (1) 77:15          d1514 (1) 139:10          d154 (7) 34:13 77:16          91:22 92:1 132:10          138:16 143:9          d156 (1) 91:22          d158 (1) 71:24          d241178 (2) 164:7          166:22          d241195 (1) 165:19          d241242 (1) 45:8          d241243 (1) 46:3          d241244 (1) 76:22          d241245 (1) 76:20          d24172 (2) 66:14 140:7          d24175 (1) 103:11          d24178 (1) 67:12          d24179 (1) 67:14          d24183 (1) 146:6          d24184 (1) 154:13          dalmellington (1) 20:22          damage (1) 194:6          damn (1) 75:22          damning (1) 178:17          danger (4) 16:11 38:7          83:19 116:6          dangerous (2) 26:21          100:4          data (244)          1:18,18,20,20,21          2:5,5,7,14,16,16,17,18          4:2,4,7,14 5:11 6:19          7:4,14 11:7 12:19          16:24 17:16 19:2,13          21:3 33:9 34:8,16,16          35:11,11 36:13,14          37:1,1,2,8,10,11,19,20,25          38:4,18,18,22,23          39:1,2,12,14,15,18          42:4,12 45:18 48:3          49:4,6,6,20,21          50:1,3,6,7,12          51:8,10,11,14,18,18          52:5,13,14,19,22          53:1,2,8,21,22,23          54:4,7 55:15,16,16          57:8,11,18,20,23          58:11,12,17,25          59:7,9,23,24          64:11,14,21          65:13,13,14,15 66:23          67:2,3,7,23          68:2,4,4,20          69:2,3,5,13,13,15,18,19,20          70:4,5 72:3,11          73:12,15,17,18 74:8          77:8,19,21          79:3,11,20,21,23          80:7,13,14,15,16          82:11,15,21 83:17,25          84:5,7,18,19,25 85:22          86:6 87:10,19,21,23          90:16,18,23 91:17,21          96:22 97:21 98:23          100:2 105:16,20,21,24          107:4,5 117:24 121:17          122:1 123:1,15,15          132:19</p>	<p>133:6,12,18,19,22,23,25          134:14,17,18,19          137:18,19,20,22 138:1          139:6 143:12,16          145:1,16 146:10,24          147:3,8,10,20,24          148:3,12          149:9,11,12,15,16          152:20,24 153:2,6,7,9          155:3,8,10,13,14,18,20          157:7 160:15,24          193:25 196:12          database (6) 39:23          96:22 99:23 140:12          141:25 145:5          databases (1) 196:12          datasets (1) 194:11          date (7) 2:8 3:4,17,18          4:9 5:7 193:17          dated (3) 104:4,17          156:20          dates (2) 4:25 5:2          day (16) 61:6,7,11,16          62:8,21 70:6 75:5          92:11 98:12 106:21          122:3 140:23 152:5          192:14 200:4          day164321 (1) 46:24          days (6) 14:9,9,9 163:4          170:9 182:24          dbas (1) 77:6          de (86) 1:4,5,7 11:23,24          23:13,23,25 24:3,24          46:21,25          47:6,9,15,16,17 61:24          62:2,24 63:6,13,18          64:4 81:20 86:4,17,21          87:5 95:20,22,25          97:1,5 100:21,24          101:2,5,10 102:1,6,24          124:7,10,14,16,22,25          125:6,9,12,17 129:5          130:6,13,19,22,24          131:2,4,7,14,20,24          132:3,7 135:5,9          136:1,12 143:4,8          153:20,25 154:10          179:15,16 190:4          191:21,23 192:15          193:1 197:10          199:15,25 201:3          deal (17) 7:25 16:14          36:24 47:10 70:13          71:21 89:7,10,11          105:24 119:5 146:7,9          151:9 152:1 163:25          172:18          dealing (5) 21:2 72:16          114:3 133:7 153:10          deals (3) 121:22 138:12          167:4          dealt (8) 8:11 27:17          59:21 138:17 144:2          153:11 185:7 187:14          debate (8) 44:11 87:16          141:10 186:7 191:6          192:7,16,21          december (25) 12:7          104:4,18 105:13          110:6,11 124:12,18          125:6,15,16          128:20,23,25          129:2,7,8,11,13</p>
--	---	---	---	---	---	--

130:20 131:1,11,16  
132:1 188:16  
**decide (3)** 3:20 49:5  
52:25  
**decided (2)** 89:7 178:23  
**decides (6)** 7:24 10:8  
50:9 57:19,23 109:16  
**deciding (3)** 59:8  
148:13 199:7  
**decision (11)** 28:15  
32:11 50:19 53:3,7  
59:22 91:14 177:19  
178:22 186:21,23  
**decrypt (1)** 79:23  
**def (1)** 158:8  
**default (1)** 93:6  
**defect (1)** 150:25  
**defects (2)** 72:10 187:4  
**defendant (6)** 1:16 5:22  
8:17,19 9:3,7  
**defensive (1)** 39:1  
**deficiencies (9)**  
164:8,11,12,14,19,20  
165:5,10 174:8  
**deficiency (6)** 164:13  
169:14 174:5 182:4  
183:8 184:5  
**deficient (1)** 182:14  
**defined (1)** 138:25  
**defining (1)** 35:6  
**definitely (2)** 160:23,24  
**definition (6)** 2:11 36:6  
40:2 44:22 50:25  
144:12  
**delete (10)** 1:17 34:15  
145:1 146:10 149:5  
152:19 154:21  
155:10,15 159:19  
**deleted (6)** 33:5,10  
42:22 79:9 155:9,10  
**deleting (9)** 5:11 35:10  
42:6,8,12 143:16  
149:14 155:19  
**deletion (15)** 34:1  
42:16 132:19,21 133:5  
137:18,22 148:25  
152:24 153:5,6  
155:2,7,17,20  
**deletions (4)** 12:19 67:7  
132:24 133:1  
**deliberate (1)** 51:23  
**deliver (1)** 79:20  
**demonstrate (1)** 56:25  
**depending (2)** 44:22  
70:7  
**depends (3)** 92:11,18  
115:20  
**depict (1)** 185:4  
**describe (3)** 11:3 35:19  
36:4  
**described (6)** 43:20  
47:4 97:23 98:25  
107:19 120:16  
**describes (2)** 87:7 98:21  
**describing (3)** 116:23  
151:22,23  
**description (1)** 188:13  
**design (1)** 82:17  
**designed (7)** 34:5,6  
45:24 71:12,18 105:18  
151:16  
**desire (1)** 96:11  
**desk (1)** 87:10

**destination (3)** 72:7,25  
73:14  
**destined (1)** 52:15  
**detail (6)** 83:6 116:10  
119:5 120:8 130:10  
183:1  
**detailed (2)** 110:25  
165:12  
**details (9)** 64:25 120:13  
121:5,6 124:19 125:9  
131:17 134:12 154:16  
**detect (1)** 72:9  
**detected (2)** 75:5  
196:22  
**determination (4)** 15:7  
65:16,18 149:17  
**determine (1)** 21:10  
**detract (2)** 42:18 43:2  
**detracts (1)** 77:25  
**detrimental (1)** 82:8  
**develop (1)** 197:18  
**development (3)** 196:5  
197:15,19  
**deviation (2)** 190:15  
197:4  
**deviations (8)** 188:25  
190:1,13,22 193:12  
194:17 198:5,6  
**didnt (29)** 6:24 7:25  
9:20,22,24 45:1 60:16  
69:11 75:20 76:8  
83:10 89:3,6 99:4  
108:9 110:14 122:4,5  
155:7,10,15 171:8  
172:2 178:17  
187:18,24 188:2  
193:15 198:10  
**differ (1)** 151:19  
**difference (2)** 38:8  
127:13  
**different (23)** 3:24 16:8  
27:17 31:4 37:21  
38:11 39:9 42:14,16  
50:7 58:25 59:13 69:4  
74:16 83:2 84:16  
85:24 86:4 136:21  
150:18 159:6 172:17  
185:4  
**differently (2)** 59:21,21  
**differs (1)** 46:8  
**difficult (7)** 30:22 86:12  
95:4,5 105:17 126:24  
136:4  
**difficulties (1)** 114:19  
**direct (1)** 53:2  
**direction (1)** 75:16  
**directly (3)** 45:19  
165:23 181:2  
**disable (2)** 190:9,10  
**disagree (2)** 45:12 93:8  
**disc (1)** 79:17  
**disclosed (7)** 9:21 10:19  
12:7,10,15 139:15,17  
**discovered (2)** 35:25  
75:9  
**discovery (2)** 101:2  
136:2  
**discrepancies (1)**  
111:14  
**discrepancy (7)** 27:3  
51:16 52:4 55:1 56:20  
59:4 113:22  
**discretion (1)** 39:17

**discretionary (3)**  
132:24,25 133:5  
**discuss (7)** 14:3 23:13  
68:13,18 86:7 89:13  
199:23  
**discussed (20)** 4:3 7:14  
9:10 19:10 25:25 33:3  
35:22 36:1 48:1 50:23  
67:1 77:24 79:13 81:6  
85:23 90:18 156:4  
163:4 170:7 183:20  
**discusses (3)** 78:12  
93:10 140:16  
**discussing (5)** 89:19  
161:21 183:18 184:18  
187:17  
**discussion (6)** 23:3 41:7  
89:12 148:25 172:16  
192:16  
**disk (3)** 79:17 81:23  
84:21  
**dispute (5)** 31:8 55:25  
57:16 68:17 187:13  
**disputed (2)** 56:13  
57:15  
**disputes (1)** 56:3  
**dissat (1)** 98:9  
**distillation (1)** 171:9  
**distinct (1)** 25:16  
**distinction (7)** 42:7  
68:24 69:11,12,14  
70:3,11  
**distinctions (1)** 36:13  
**distinguish (1)** 15:10  
**document (43)** 7:17  
8:3,4 30:12 66:16  
81:22 82:5 85:4 95:18  
100:19  
112:22,22,24,25 117:5  
122:15 123:10 125:24  
131:15 132:8 135:17  
136:13 139:10  
166:9,19 167:11 170:5  
172:1 173:2 174:19  
180:14,17 182:25  
190:16,17,25  
191:3,6,9,12,15 193:4  
196:17  
**documentation (1)**  
194:1  
**documented (4)** 28:17  
195:23 196:6 197:16  
**documents (55)** 8:6  
9:9,18,20,21 10:18,19  
11:3,5,8,25 12:15  
13:4,10 14:4 19:18  
26:9 80:21,23 81:1  
82:18,18 85:2,12  
95:24 97:8,12,13,14  
98:5,16 99:21,22  
114:22,24 125:5  
127:19 128:25 161:15  
162:3,5,17,18  
163:1,11,14 176:12,19  
178:12,13 187:18  
188:19 192:7,9,19  
**does (42)** 3:9,9 10:6  
33:6 36:10 38:14  
56:25 57:2,4 69:22,23  
71:9 72:14 73:18  
80:19 87:24 97:14  
104:6,6 121:8,15  
125:13 127:1 132:1

135:19 140:18,21  
142:8 145:10,11  
148:23 150:25 151:10  
171:19 181:1 184:15  
188:24 189:12 190:23  
191:17 192:10,15  
**doesnt (53)** 4:19 10:5  
14:16 25:16 26:4  
27:14 36:8 38:14  
42:18 43:2,16 44:12  
49:19 54:23 63:7  
73:4,18 86:17 87:20  
92:16 94:14 102:6  
103:11 108:14,19  
121:13,15  
122:14,24,25 127:7  
138:13  
145:8,14,17,23,24  
149:19,19 150:21  
151:11,12 160:14,15  
165:14 168:11  
169:3,13 172:1,13  
184:19 186:3 192:9  
**doing (21)** 19:17 27:4  
28:9 35:13 73:11  
74:10 92:6,7,15,15,16  
95:13 100:9,12 101:13  
124:6 135:19 142:7  
157:5 184:3 185:13  
**dollar (1)** 126:15  
**dollars (1)** 115:12  
**done (66)** 2:1 15:15,15  
17:20 18:8,11 22:13  
25:21,22,24 28:3,15  
31:15,25 34:19 39:7  
49:14 52:16 54:8  
61:18 62:21  
63:16,17,23 64:19  
65:4 70:23,25  
71:13,16,19 73:25  
76:13 83:2 89:14  
90:16 92:9 94:20 98:3  
99:19 100:11 101:24  
102:6 112:19 116:21  
125:17,18 128:3 129:6  
131:23,23 135:22  
137:4 153:13 155:14  
160:14 161:14  
162:1,11,12,19  
163:9,13 169:25  
173:23 188:6  
**dont (83)** 4:14 6:8  
13:12,16,25 14:3 15:2  
18:16 20:6 23:1 26:14  
27:9,19 29:4 30:5,23  
40:15 43:9 53:6  
55:10,19,20 56:8 57:9  
60:4,18 61:9  
62:10,11,15 64:23  
68:18,21 70:12 72:18  
77:10 81:9 82:6 86:9  
89:24 90:2 91:18  
92:17 95:12 99:15  
100:9,15 103:9 104:3  
106:9,21 110:23 112:1  
114:2,16  
119:5,6,11,13  
120:11,12 139:20  
143:14 144:2 145:1  
147:25 148:24  
153:17,22 154:12  
155:6 161:11  
162:13,16 163:1,15,16

171:8 172:12 188:11  
191:25 193:21 194:19  
**double (1)** 157:4  
**doubling (3)** 88:5  
90:10,20  
**doubtless (1)** 101:13  
**down (23)** 28:2  
58:15,18 86:19  
104:17,18 105:13  
106:1 110:6,11,12  
121:5 124:11 128:23  
131:15 136:11  
157:4,14 158:4 159:2  
180:13 193:8,10  
**dozen (1)** 62:18  
**dr (16)** 9:10,17 14:4  
22:18 24:8,11,21 30:7  
32:8 45:12 99:7 145:3  
165:24 187:19 192:2  
198:11  
**drafted (1)** 44:7  
**draper (1)** 78:22  
**drawn (3)** 42:7 68:25  
110:18  
**driven (1)** 27:24  
**drives (1)** 33:13  
**due (6)** 45:23 98:12  
106:11,15 153:19  
154:17  
**dummy (3)** 118:4,19,20  
**duplicate (1)** 90:24  
**duplicating (1)** 83:13  
**during (11)** 23:25 30:2  
100:5 141:10  
156:20,22 158:9  
160:21 161:24 162:1  
199:1  
**duties (2)** 168:16,24

---

**E**

---

**e21210 (1)** 97:1  
**e21212 (1)** 78:24  
**e21213 (1)** 87:6  
**e2129 (1)** 92:23  
**earlier (4)** 28:24 50:24  
52:12 103:2  
**early (5)** 22:22 23:18  
30:18 140:20 157:20  
**easier (1)** 141:21  
**easiest (1)** 47:10  
**easily (2)** 19:22 94:12  
**easy (5)** 19:21 21:21  
75:12,14 146:4  
**edit (7)** 1:17 34:15  
84:22 133:15 137:6  
142:18 145:1  
**edited (5)** 134:5,19  
136:8 137:9,15  
**editing (15)** 1:14 5:11  
32:17 35:10 42:3,3  
81:24 133:23,24  
134:14 136:7 137:2,19  
138:1 143:16  
**editor (5)** 81:3 83:17,19  
144:19 145:21  
**edits (3)** 12:19  
133:11,21  
**edsc (3)** 105:14  
120:8,10  
**effect (15)** 18:9,11 70:7  
95:14 97:12 111:8  
118:24 128:9 131:21

134:1 140:20 148:7  
149:6 155:24 162:7  
**effectively (5)** 65:9  
88:24 117:25 131:18  
138:8  
**effectiveness (3)** 179:24  
180:3 182:2  
**effects (4)** 15:14 107:14  
115:13,15  
**efforts (4)** 175:5,21  
196:5 197:15  
**either (24)** 5:14 7:10  
11:19 27:6,20,22 28:8  
38:17 39:14 47:11  
52:10,14,16 54:3  
56:17 59:18 60:23  
65:20 86:8 105:2  
119:14 128:25 173:22  
200:1  
**electronic (1)** 72:21  
**electronically (2)** 45:3  
46:9  
**element (1)** 7:24  
**elements (6)** 25:10  
32:18 78:2 82:25 83:8  
89:1  
**else (9)** 6:8 63:8 76:9  
102:20 110:22  
119:4,21 134:8 167:13  
**elsewhere (4)** 49:17  
69:14 70:5 79:8  
**embedded (1)** 173:14  
**emergency (1)** 7:10  
**enable (1)** 133:14  
**end (10)** 5:3 36:2,18  
93:4 106:4 136:6  
148:18 157:19 187:16  
191:2  
**endeavour (1)** 150:14  
**ended (1)** 30:16  
**endorsed (1)** 181:18  
**endorsement (1)** 180:8  
**engaged (1)** 181:10  
**english (1)** 106:14  
**enhance (4)** 169:11,13  
179:23 182:2  
**enhanced (1)** 171:17  
**enhancement (6)** 170:2  
182:8 183:6,8,9 184:4  
**enhancements (2)**  
180:1,11  
**enhances (3)** 42:18 43:2  
77:25  
**enlighten (1)** 200:1  
**enough (2)** 65:21  
100:19  
**ensure (14)** 35:14 51:7  
53:20 54:22,23 58:3  
74:14 111:14 141:22  
153:12,13 162:11  
173:16 194:25  
**ensures (1)** 105:10  
**ensuring (2)** 54:7 57:24  
**entered (4)** 83:1 94:11  
116:5 147:4  
**entering (1)** 46:7  
**enters (1)** 147:7  
**entire (4)** 5:3 22:15  
68:5,19  
**entirely (5)** 23:5 56:8  
108:24 177:23 193:18  
**entirety (1)** 134:3  
**entitled (1)** 167:25

**entries (5)** 110:10 125:2  
131:18 138:18 142:17  
**entry (8)** 46:5 85:18  
121:5 124:24 125:3  
158:8,9,15  
**envelope (3)** 80:7,13,16  
**envious (1)** 189:23  
**environment (8)** 83:18  
117:21 119:6,23  
164:18 175:6 180:22  
181:1  
**environmental (1)**  
194:7  
**equal (5)** 111:4 113:22  
114:8 127:25 128:4  
**equipment (2)** 193:25  
194:5  
**ernst (25)** 163:2,17  
165:8 166:11 167:3  
171:1,4,5,11 172:8  
177:8,23 183:7 184:7  
185:3,7 186:13 187:22  
188:4,6,24 190:25  
191:12 193:14 196:16  
**erroneous (10)** 53:1  
55:15 58:17,22 59:8  
60:5 64:21 74:23  
82:12 85:18  
**erroneously (2)** 54:8  
77:8  
**error (34)** 6:3 43:17  
44:18,20 45:1,3  
46:6,12,16 47:11  
50:16,17 51:25 54:20  
55:3,8,12,13 58:23  
59:7,18 60:2,3 76:8  
82:10 115:5,11 119:11  
125:22 129:22,23  
150:25 154:16,17  
**errors (5)** 31:4,9  
59:13,16 187:4  
**essential (1)** 103:12  
**essentially (1)** 6:6  
**establish (3)** 36:8,12  
134:15  
**established (3)** 168:20  
169:21 173:10  
**estate (1)** 152:15  
**evaluate (1)** 198:11  
**even (3)** 14:3 71:16  
108:19  
**evening (2)** 63:17,24  
**event (1)** 115:3  
**events (6)** 66:3 94:14  
165:14 167:10 181:12  
183:16  
**eventualities (1)** 146:18  
**eventuality (2)** 53:5  
54:12  
**eventually (1)** 141:15  
**ever (2)** 31:7 76:17  
**every (8)** 6:25 8:4  
149:23 150:15  
172:13,14 178:18,19  
**everyone (3)** 87:21  
95:10 136:18  
**everything (1)** 129:14  
**evidence (4)** 7:16 8:1  
9:5 15:25 26:5 27:22  
29:8,17,20 30:9,11  
31:10 33:12 45:4  
56:1,6 57:10 61:18  
62:22 66:19 67:5

71:10 76:24 85:11  
 94:5,21 95:15 96:2  
 102:16 117:12  
 134:13,14 144:1 162:5  
 163:12 164:8,10,12  
 171:22 178:16 179:5  
**evidential (2)** 101:18,18  
**exact (1)** 125:4  
**exactly (5)** 23:23 29:4  
 124:6 160:9 193:4  
**example (26)** 3:18 4:25  
 15:14,17 16:22 20:23  
 30:20,21 39:18,24  
 40:22 48:2 108:4  
 110:20 133:5,13,20  
 134:7,18 136:14,16,22  
 137:25 138:5 155:25  
 163:14  
**examples (13)** 2:3 6:22  
 21:13 29:1 33:17,20  
 55:23 74:21 132:25  
 148:20 156:9,11,12  
**except (1)** 190:1  
**exception (7)** 51:25  
 52:23 103:25 104:11  
 106:20 109:7 110:8  
**exceptional (2)** 113:24  
 114:2  
**exceptions (3)** 104:2  
 109:2 179:21  
**exchange (2)** 87:3  
 115:20  
**exchanges (1)** 86:9  
**excluded (3)** 32:17 35:9  
 46:19  
**excluding (1)** 44:7  
**executive (4)** 163:22  
 164:25 165:11 166:22  
**exegesis (1)** 95:22  
**exemplified (1)** 68:6  
**exercise (12)** 19:16 20:9  
 21:8 22:17 27:13  
 40:10,20 62:5,8,14  
 63:16 121:16  
**exercised (12)** 7:13 18:3  
 19:1,12,19 20:16  
 21:23 27:16  
 29:2,21,21 62:4  
**exercises (4)** 19:7 20:25  
 21:19 41:23  
**exercising (1)** 39:17  
**exist (1)** 94:14  
**existed (2)** 79:16  
 177:20  
**existence (5)** 16:4 23:16  
 145:10,14 178:10  
**existing (1)** 181:15  
**exists (2)** 105:8 176:22  
**expect (1)** 114:2  
**expected (2)** 151:25  
 172:11  
**experience (1)** 182:17  
**experienced (1)** 10:2  
**expert (5)** 9:15 10:2  
 70:10 91:22 185:18  
**explain (2)** 109:1  
 145:21  
**explained (6)** 10:23  
 11:4 70:20 91:5 101:8  
 183:1  
**explaining (2)** 56:7  
 127:18  
**explains (1)** 151:21

**explanation (1)** 127:8  
**explanatory (1)** 151:20  
**exploit (1)** 15:22  
**explore (1)** 92:14  
**exploring (1)** 64:5  
**expose (1)** 163:8  
**expressed (2)** 103:21  
 185:3  
**expresses (1)** 188:24  
**expression (1)** 102:15  
**expressly (1)** 110:23  
**extent (6)** 21:22  
 25:10,13 55:10 87:13  
 145:18  
**external (2)** 58:24  
 196:21  
**extra (2)** 116:10 120:8  
**extract (2)** 49:5 79:20  
**extracted (1)** 33:13  
**extremely (3)** 25:24  
 66:8 76:25  
**exuberance (1)** 199:17  
**eye (2)** 193:8,10  
**eyes (3)** 13:5,8 85:14

---

**F**

---

**f10411 (1)** 188:12  
**f104110 (1)** 191:25  
**f10417 (1)** 191:17  
**f104170 (1)** 193:23  
**f104171 (1)** 194:3  
**f104172 (1)** 194:9  
**f104173 (1)** 194:14  
**f104174 (1)** 194:22  
**f104176 (1)** 195:2  
**f104178 (1)** 195:13  
**f104180 (1)** 195:19  
**f104181 (1)** 196:2  
**f104183 (2)** 189:6 190:4  
**f104185 (1)** 196:10  
**f104187 (1)** 196:18  
**f104188 (1)** 193:3  
**f11381 (1)** 174:17  
**f11384 (2)** 179:9,16  
**f11387 (2)** 174:18  
 175:19  
**f11388 (1)** 180:10  
**f156283 (2)** 197:7,12  
**f17001 (1)** 154:4  
**f33711 (2)** 134:23 135:2  
**f37711 (1)** 135:12  
**f37716 (1)** 136:7  
**f432 (1)** 124:7  
**f4321 (2)** 103:5 124:9  
**f4322 (2)** 106:9 128:21  
**f43221 (1)** 115:9  
**f4323 (3)** 110:24 124:11  
 127:17  
**f43411 (2)** 120:7 126:2  
**f4851 (1)** 93:17  
**f4852 (1)** 93:19  
**f4853 (2)** 93:20,21  
**f4854 (1)** 93:20  
**f5941 (2)** 140:8,15  
**f6111 (1)** 156:19  
**f6112 (1)** 157:13  
**f6113 (1)** 157:23  
**f8691 (2)** 163:19 167:12  
**f86911 (1)** 164:17  
**f86923 (1)** 167:21  
**f86925 (1)** 168:15  
**f86929 (1)** 169:7  
**f8693 (2)** 163:22 164:24

**f86938 (1)** 169:24  
**f86947 (1)** 173:6  
**face (2)** 38:10 66:16  
**facilities (7)** 17:15 43:9  
 79:10 138:12 145:8  
 193:25 194:5  
**facility (5)** 5:24 17:3  
 25:13 123:7,9  
**facing (1)** 10:7  
**factored (1)** 200:6  
**factors (1)** 183:1  
**factory (1)** 82:1  
**fad (25)** 19:14,14,24,24  
 20:11,21 21:17  
 22:2,3,5,8,15,16,18,20  
 24:5,8,10,13,20,24  
 25:6,9 70:24 104:19  
**failed (9)** 33:13 79:7  
 81:24 84:21 107:1  
 151:16 190:7,9,11  
**failing (1)** 33:12  
**fails (3)** 78:4 148:15  
 151:23  
**failure (2)** 147:11  
 157:18  
**fair (30)** 5:4 13:21  
 15:24 18:2,7 27:1 28:4  
 30:4 31:14 48:23  
 65:24 80:4 93:14,25  
 105:7 118:15,21  
 122:23 164:2  
 167:16,18 169:5,6  
 173:20 185:22 186:17  
 187:10,11 190:20  
 199:5  
**fairly (5)** 55:2 56:9  
 76:23 114:4 178:20  
**fairness (3)** 23:9 61:21  
 197:6  
**false (7)** 29:25 30:17  
 31:15 32:1 58:4 59:14  
 158:15  
**familiar (3)** 53:19 93:11  
 108:6  
**familiarity (1)** 10:5  
**far (10)** 27:12 29:20  
 87:11 167:25 168:17  
 169:17 172:7 173:8  
 175:9 176:2  
**fast (2)** 35:13 189:22  
**fault (4)** 7:1 52:17  
 133:11 143:20  
**faulty (2)** 79:10,17  
**favour (2)** 4:11 63:14  
**favouring (1)** 55:15  
**feasible (2)** 181:11,22  
**february (3)** 11:20  
 12:13,14  
**feed (4)** 120:22 124:19  
 125:9 126:7  
**feeds (1)** 48:3  
**feel (1)** 183:25  
**felt (4)** 156:14 178:13  
 186:10,15  
**few (12)** 1:10 26:24  
 29:1 33:18,21,22  
 84:13 152:15 161:7,9  
 162:1 187:16  
**fiddling (1)** 134:9  
**field (1)** 38:12  
**fields (4)** 38:9,13,16  
 64:17  
**figure (18)** 30:17 31:15

53:15 58:5,9 59:8  
 60:6,6 116:4,7 120:5  
 125:24 126:2,5  
 129:19,20 158:16,20  
**figures (17)** 32:1  
 56:8,19,20,21  
 58:3,7,20,23 111:9  
 126:19,20 127:8,9,10  
 128:9 159:19  
**file (2)** 105:15 139:11  
**files (3)** 48:21 194:11  
 196:12  
**fill (1)** 141:21  
**filled (1)** 20:1  
**filter (1)** 60:22  
**final (3)** 66:13 107:6  
 184:12  
**finalised (1)** 9:22  
**finance (5)** 175:8,22  
 176:1,5,7  
**financial (3)** 180:4  
 187:21 188:5  
**find (12)** 35:2 62:22  
 78:15,21 81:10 87:25  
 102:12 130:16 151:5  
 187:6,6 191:10  
**finding (2)** 19:17,18  
**findings (2)** 165:12  
 173:2  
**fine (3)** 62:1 129:15  
 174:22  
**finish (10)** 3:20 29:16  
 31:1 35:16 57:14 64:4  
 65:6 67:25 173:5  
 200:5  
**finishes (2)** 3:19 169:24  
**fire (1)** 194:6  
**first (40)** 8:22 15:12  
 23:14 24:9,12 25:17  
 41:10 42:17,20 43:5  
 56:2,9 64:7 65:7 70:2  
 72:18 77:15,23 84:10  
 98:2 101:17 103:13  
 104:17 105:3 111:2  
 115:8 117:20 124:1  
 127:23 135:22 141:2  
 143:5 157:3 159:9  
 160:1 163:21 167:20  
 168:18 177:10 183:23  
**fiveyear (1)** 198:5  
**fix (4)** 52:18 113:25  
 125:14 143:12  
**fixed (1)** 110:15  
**fixes (1)** 1:19  
**fixing (1)** 97:17  
**flag (10)** 36:19,21,22,25  
 37:18 38:1,12 86:19  
 143:19 148:11  
**flagged (1)** 197:22  
**flagging (1)** 36:17  
**flags (5)** 36:15 37:24  
 38:3 64:17 105:10  
**flick (1)** 63:12  
**flood (1)** 194:6  
**focus (4)** 16:16 77:10  
 164:3 192:18  
**focusing (1)** 77:10  
**follow (3)** 40:7 122:8  
 145:14  
**followed (3)** 91:11 93:7  
 110:1  
**following (2)** 144:15  
 171:14

**follows (6)** 49:19 75:5  
 122:3,3 127:7 163:16  
**footnote (1)** 97:9  
**forgive (2)** 51:9 166:14  
**forgotten (1)** 56:6  
**form (35)** 5:6 9:4 18:6  
 19:6,11 20:15 21:2,6  
 22:6 28:9 30:12,16  
 32:6 33:3 34:1,2,3  
 38:5,17 40:3 43:18,23  
 44:19 46:17 77:17  
 85:24 86:4 92:1  
 122:10 132:18 137:9  
 138:2,21 160:17  
 162:20  
**forming (1)** 21:21  
**forms (17)** 34:11,19,22  
 35:2,18,19,20,22,25  
 40:15,22 44:3 51:11  
 58:11 85:22 91:17  
 143:10  
**formulated (1)** 137:8  
**forthcoming (1)** 158:23  
**forward (5)** 10:23 67:12  
 119:20 191:20,24  
**found (22)** 8:7 14:4  
 20:2 26:15,24  
 29:1,7,8,9,12 33:23  
 88:7 99:10,21 100:12  
 132:25 135:17 162:1,6  
 163:12 174:4,8  
**four (9)** 13:5,8 104:18  
 124:11 163:25 166:3  
 170:14 185:17 186:12  
**fourth (7)** 14:11,15  
 34:12 71:23 136:11  
 173:6,21  
**fraction (1)** 66:11  
**fraser (94)** 1:6  
 11:2,8,11,14,18,22  
 23:16,22,24 24:20,23  
 46:21 47:1,8,10,14,16  
 61:22,25  
 63:1,4,7,15,20 67:18  
 81:13,16  
 86:2,8,12,17,23 87:3  
 95:17,23 96:24 97:3  
 100:23  
 101:1,4,7,11,17,21  
 102:5,7,15,19  
 124:6,8,13,17,23  
 125:1,8,10 129:4  
 130:5,7,14,20,23  
 131:1,3,5,9,15,22,25  
 132:4 135:1,4,7,24  
 143:3,5 153:17,21  
 154:2,5 179:14 190:3  
 191:14,19  
 192:13,23,25 197:9  
 199:13,16,22 200:1,7  
**frequently (1)** 17:14  
**friday (1)** 200:11  
**fujitsu (81)** 1:16 5:22  
 6:6,7,10,24 7:9,24 9:8  
 12:16,17,21 13:4  
 17:22 27:23 28:18  
 31:11 57:19,20,22  
 58:3,14,24 59:3,18  
 65:8 68:1 72:20  
 75:2,17,25 78:5  
 79:3,9,16 80:1,6,14  
 81:25 87:9  
 88:4,13,23,23 89:2

90:12,22 91:15 96:8  
 111:13 113:7 117:17  
 133:14,24 134:7,20  
 140:11 141:24  
 152:1,17 154:18,20  
 162:6,25 163:8  
 168:7,20,23 169:21  
 170:6 173:10,24 178:9  
 181:11 182:22 183:5  
 191:16 193:14 195:9  
 198:20 199:8  
**fujitsus (7)** 73:20 82:14  
 85:13 96:2 187:23  
 188:13 198:17  
**full (2)** 69:15 193:14  
**function (1)** 21:18  
**functions (2)** 19:11 21:6  
**fundamental (2)** 68:24  
 165:4  
**further (9)** 18:25  
 60:10,11,21,22 110:9  
 131:15 179:25 192:10  
**future (2)** 141:20 174:8

---

**G**

---

**gain (2)** 115:19,21  
**gaining (1)** 136:24  
**gareth (2)** 154:17 159:3  
**garr (86)** 1:4,5,7  
 11:23,24 23:13,23,25  
 24:3,24 46:21,25  
 47:6,9,15,16,17 61:24  
 62:2,24 63:6,13,18  
 64:4 81:20 86:4,17,21  
 87:5 95:20,22,25  
 97:1,5 100:21,24  
 101:2,5,10 102:1,6,24  
 124:7,10,14,16,22,25  
 125:6,9,12,17 129:5  
 130:6,13,19,22,24  
 131:2,4,7,14,20,24  
 132:3,7 135:5,9  
 136:1,12 143:4,8  
 153:20,25 154:10  
 179:15,16 190:4  
 191:21,23 192:15  
 193:1 197:10  
 199:15,25 201:3  
**gary (1)** 112:10  
**gas (2)** 73:2 77:12  
**gave (2)** 90:4 193:14  
**general (8)** 41:3,5 53:23  
 103:25 111:13 188:5,7  
 192:21  
**generally (7)** 86:24  
 143:5 162:6,10,13,14  
 192:13  
**generate (1)** 181:12  
**generated (5)** 104:12  
 112:9 128:17 181:2,11  
**generic (1)** 173:7  
**gene (2)** 3:13 112:11  
**get (23)** 2:6 19:9  
 26:2,14 41:21 43:5  
 56:16 57:17 75:5 78:8  
 84:21 89:3,6 91:1,8  
 108:14 122:22 132:8  
 146:3,15 151:17  
 159:23 176:11  
**gets (8)** 13:24 14:8  
 60:14 78:23 88:25  
 91:6 133:21 157:6

**getting (6)** 44:4 68:15  
 83:12 123:17 138:10  
 162:21  
**give (25)** 16:17  
 18:2,5,7,25 25:1 44:15  
 62:17,23 63:22 78:15  
 81:11 90:8 91:19  
 100:8,18 119:9 135:10  
 153:18,22 154:3  
 170:21 174:20 185:21  
 187:15  
**given (26)** 2:20 6:23  
 7:2,5 9:12,14 17:9  
 22:23 27:20 54:18  
 56:2,6 61:1 63:11  
 94:21 95:15 131:21  
 140:19 145:13  
 161:23,23 163:7  
 166:17 170:17 181:21  
 197:7  
**giving (1)** 95:11  
**glad (1)** 86:21  
**glitch (2)** 158:14 160:19  
**global (12)**  
 70:13,16,17,21,24  
 71:5,7,13,16,19 76:22  
 77:3  
**gloss (1)** 70:3  
**glossary (1)** 120:11  
**goalposts (1)** 95:6  
**godeseth (10)** 39:24  
 40:2,24 41:3 43:11  
 57:19 71:5,10 127:5  
 144:1  
**godeseths (1)** 35:22  
**goes (23)** 4:19 15:24  
 27:15,19 57:18  
 58:4,10 60:13 73:2  
 74:1,2,15 128:7  
 129:15 141:12 150:9  
 152:17 157:22 167:22  
 169:1,22,23 175:21  
**going (68)** 1:9 2:5 5:10  
 10:8,13,21,24,25  
 12:23 18:10 23:24  
 24:1 28:16 31:3  
 32:20,22 33:2 40:7,8  
 60:2 64:14 67:21  
 73:19 85:17 96:18  
 100:24 101:11,11  
 102:19 104:1,24  
 116:21,24 117:25  
 118:11,18,19,23  
 119:18 127:5,19  
 130:11 146:7,7  
 149:15,22 151:3,3,24  
 152:6 153:23 155:16  
 163:25 164:1 172:15  
 174:19 185:6  
 186:5,7,8,8  
 191:1,19,24 192:8  
 193:21 197:9 200:3  
**gone (10)** 22:16 23:14  
 74:23 75:15 92:20  
 99:22 106:23 129:16  
 133:9 197:5  
**good (17)** 1:5,6,7,8  
 17:18 20:1 47:15  
 62:24 76:6 99:8  
 102:24,25 103:4 146:1  
 153:24,25 190:18  
**governance (1)** 167:21  
**granted (1)** 11:7

grateful (6) 65:6 71:22  
87:2,4 136:5 143:4  
great (6) 32:14  
38:24,25 71:21 119:5  
162:12  
greater (4) 92:10  
94:15,22 183:1  
green (14) 23:9,18  
86:8,11,14,24 87:2,4  
102:8,13,17 103:8  
154:4 200:3  
ground (5) 36:17  
134:16 144:25 152:8,9  
group (6) 22:2,2 23:3,3  
25:7 190:7  
groups (1) 6:14  
guideline (1) 168:24

**H**

hack (1) 72:23  
hacking (2) 73:4,6  
hadnt (4) 56:17 98:17  
176:16,18  
hairs (1) 38:8  
halfway (1) 157:4  
hand (3) 19:4,16,16  
handful (4) 85:5,7  
100:5,13  
hands (1) 110:4  
hang (1) 60:16  
happen (16) 26:4 31:5  
33:16 34:10 51:22  
54:23 56:18 60:3,11  
86:16 87:22 88:10  
109:14 148:10 151:23  
152:2  
happened (32) 3:10  
19:8 22:7 23:6 25:3,17  
26:3,6,17 28:24 29:19  
31:24 56:18 74:19  
75:6,23 76:17 82:20  
88:8,18 90:22 93:25  
100:1 109:14 117:15  
125:15 127:18 129:14  
140:20 142:25 158:12  
162:17  
happening (11) 7:16  
31:9 39:24 55:18 60:8  
66:7 74:21 80:3 85:17  
105:17 110:20  
happens (26) 7:16  
34:4,7 49:9 55:12 59:6  
73:24 74:7 88:14  
109:6,12 114:5 129:5  
141:6 142:4 145:19  
146:23 149:23,24,25  
150:16,22,23  
152:8,9,14  
happy (7) 31:21 69:12  
86:1 91:24 101:25  
192:6,11  
hard (4) 33:13 63:11,14  
102:10  
hare (1) 46:22  
harmful (1) 165:14  
harvested (2) 58:10  
113:20  
harvester (1) 106:20  
harvesting (2) 51:4  
107:3  
hasnt (4) 8:17 27:16  
149:18 158:6

havent (26) 9:18 13:14  
17:7,11 24:6,7,17  
29:7,8 32:18 36:1  
74:21 85:3,10 91:22  
92:20 98:4 107:22  
109:9 130:15 162:2  
164:18 174:20 182:17  
187:13 200:6  
having (24) 27:12 29:2  
33:12 43:24 45:20  
77:2 89:12 134:19,19  
135:17 142:2 146:13  
152:11 161:2 165:14  
178:12 184:24 185:2  
186:10,14 191:6  
192:8,16,17  
hazards (1) 194:7  
headed (2) 189:25  
193:2  
heading (10) 1:14  
66:18,18 67:10 68:3,8  
76:21,22 152:24  
179:17  
health (1) 193:14  
heard (2) 85:12 113:16  
held (19) 12:20  
49:6,13,21 50:1 53:23  
60:6,7 66:23 67:2,7  
68:4 69:2,13,19 84:7  
118:4 122:1 139:6  
hell (1) 74:19  
help (4) 2:3 125:13  
191:17,22  
helped (1) 20:4  
helpful (21) 9:16  
13:17,25 14:3,7  
22:12,19 68:23 69:6  
70:9 76:25 78:21  
86:10,21 87:3 88:21  
95:15 98:1 99:11  
186:19 199:10  
helping (1) 90:23  
helpline (2) 60:18 90:20  
hence (2) 106:21 181:3  
here (38) 6:7 32:16  
35:19 45:9,11 46:19  
69:23 71:25 72:19  
81:19 98:16 99:20  
103:25 107:19 109:6  
114:7 115:10 116:24  
118:11 120:16,17  
121:10,11 122:9  
131:3,11 140:7 142:20  
143:23 147:23 152:22  
155:7 159:6 160:14  
174:23 179:11 190:24  
193:16  
heres (2) 144:25 177:21  
hes (1) 63:4  
high (4) 61:6 94:8,10  
150:7  
higher (1) 26:13  
highland (1) 75:18  
highlighted (1) 125:2  
highlights (1) 114:18  
himself (2) 74:15  
108:19  
hint (1) 14:24  
historic (1) 97:18  
historical (1) 3:1  
history (1) 25:8  
hngx (6) 180:3,11,24  
181:3 182:1 188:15

hold (5) 11:11 79:18  
96:24 166:12 179:9  
holder (1) 4:4  
holds (1) 69:5  
homework (4) 81:11  
95:9 135:21,24  
honesty (1) 100:17  
hope (5) 110:5 138:17  
139:8 140:8 197:10  
hopefully (1) 148:12  
horizon (71) 1:19  
5:14,15,23 6:17 14:2  
15:6 26:12,13 30:3  
32:12,23 33:25 35:7  
36:9 37:8,10,17,20  
40:6,11,24 41:4 44:4,6  
45:22,24 47:19 48:1,2  
49:22 59:9 69:1 70:10  
71:17 72:10 77:15,19  
79:4 92:3 100:6 103:2  
105:8 106:23 123:7  
133:6,12 134:22  
137:17  
138:2,13,15,18,21,24  
140:12,21 141:25  
143:12 146:20 150:21  
151:1,12,13 156:22  
165:25 170:6 177:18  
187:24 191:2 194:20  
host (1) 120:15  
hour (1) 36:8  
hours (3) 81:14 118:14  
159:2  
however (7) 97:22  
112:8 123:10 128:15  
175:7,22 181:1  
huge (1) 16:13  
hugely (1) 21:9  
human (7) 39:17 51:22  
53:10 55:3,8 109:23  
157:21  
humanly (1) 146:8  
hundreds (10) 8:8,9,10  
26:15,15,18 29:7,8  
37:22 39:4  
hyperlink (1) 125:3  
hypotheses (1) 77:11  
hypothesised (1) 91:7  
hypothetical (1) 90:21

**I**

id (5) 62:20 80:14 84:2  
136:9,9  
identical (1) 119:19  
identifiable (6) 94:7,12  
96:4,5,10,15  
identified (15) 9:18  
10:23 20:5 35:21 94:3  
103:16 133:13 164:12  
166:9 179:20,22  
181:24 194:12,18  
195:17  
identify (12) 19:21  
20:10,16 21:1,5  
22:4,14,25 72:22  
95:18 165:14 187:3  
identifying (2) 18:1  
114:19  
idiotic (1) 75:3  
ie (1) 80:13  
ii (1) 1:18  
iii (1) 1:21  
illustration (1) 57:6

im (153) 1:9 2:5,7  
5:2,10 6:14,16,21  
7:7,23 8:15 9:6  
10:12,21,23,24,25  
11:16 12:12 15:2  
23:9,24 24:8,11  
31:7,8,21 35:13,13,13  
39:9,10,10 40:7,8  
41:20,20 44:1,16,16  
45:6,7 48:22,22 51:8  
59:10,11 62:20  
63:13,13,14 65:6,15  
66:17 67:15,21 68:11  
70:8 71:21 73:5,6  
74:13 80:20 81:6,8  
82:22 86:1,21 87:2,4  
89:9,9,13 90:3  
91:3,3,24 92:14  
95:4,10,10,11 96:18  
97:2 98:24 99:18  
100:11 101:10,11  
102:19 108:1,11,24  
109:19 110:11 118:9  
119:9 124:6 127:3  
129:24 130:10,10  
131:8 132:12 134:6,15  
135:14,16 137:16  
138:10,10 140:15  
142:22 143:4,7,20  
144:7 146:6,7 151:3,3  
159:6 163:25 164:1  
165:18 167:12 171:21  
174:7,19,23 177:13,14  
178:15,25 180:13  
183:7,20 185:18,21  
186:3,7,7,8 189:21,23  
191:3,19,23 192:6,11  
196:15 199:18 200:3  
imagine (6) 15:17  
63:2,3 106:5 145:7  
199:20  
imbalance (1) 121:2  
immediately (4) 74:18  
124:24 140:16 178:18  
impact (21) 4:17 5:1  
15:20 16:4,22 32:25  
33:1 37:10 43:25  
49:24 67:4 68:9 82:8  
97:12,14 111:23  
119:24 127:10 128:15  
165:23 180:2  
implement (2) 1:19  
197:19  
implemented (5)  
179:24 180:22 195:23  
196:6 197:16  
implementing (1) 175:6  
implication (1) 103:17  
implics (1) 42:17  
import (10) 20:3 78:10  
82:2 83:25 84:14,22  
99:10,15,16,21  
importance (2) 182:5  
198:9  
important (13) 12:4  
15:10 36:12 40:13  
42:6 77:6 131:9 189:5  
195:7,24 196:7,14  
198:19  
imports (1) 82:3  
imposing (1) 13:5  
impossible (1) 59:12  
impressed (1) 189:22

impression (5) 119:9  
163:7 166:17  
170:13,16  
improve (10) 141:8  
166:1,7 167:17,21  
177:7 178:4,15 179:25  
182:8  
improved (3) 141:11  
173:23 197:1  
improvement (7)  
169:14 179:23  
182:11,14 183:9  
198:3,7  
improvements (3)  
175:3,20 187:12  
improving (1) 168:2  
inappropriate (1)  
153:14  
incautious (1) 150:14  
incident (3) 8:4 96:21  
197:25  
incidents (2) 96:22  
195:4  
include (9) 14:7 44:12  
95:9 99:15 105:15  
117:8 144:23 169:12  
173:11  
included (11) 7:8  
24:8,10 117:13,24  
149:20  
175:8,12,15,17,22  
including (5) 48:3 58:12  
87:16 188:17 189:9  
incomplete (5)  
110:8,25  
inconsistency (3) 54:21  
115:23 116:1  
inconsistent (2) 54:9  
151:25  
incorrect (2) 53:15 58:9  
incorrectly (2) 31:25  
112:19  
increased (1) 177:16  
incredibly (1) 30:22  
independent (3) 65:14  
179:21 188:16  
indepth (1) 75:22  
index (2) 97:17 201:1  
indicate (8) 17:19 20:6  
28:3 82:19,20 115:1  
145:11,12  
indicated (4) 31:4 44:17  
76:23 183:21  
indicates (7) 29:17  
31:11 37:3 68:1  
104:24 112:25 117:25  
indicating (5) 19:18  
28:23 30:12 45:1  
142:13  
indication (8) 18:2 19:9  
20:3 25:2 26:14 37:5  
92:8 106:25  
indicative (1) 154:20  
indicator (1) 38:20  
indirectly (1) 70:6  
individual (3) 64:15  
71:6 133:2  
individuals (4) 10:6  
189:11 194:2 196:13  
inevitable (1) 146:14  
inevitably (2) 64:13  
152:6

infer (1) 31:14  
inference (1) 167:1  
inferring (2) 69:10  
142:5  
influencing (1) 97:18  
inform (1) 9:3  
information (19) 5:18  
17:18 18:25 22:22,24  
39:6 48:18 49:17  
51:23 57:25 71:8  
87:13 98:17 104:24  
111:19 114:23  
116:11,24 146:2  
informed (2) 24:8  
103:22  
infrastructure (2)  
187:23 188:14  
inherent (1) 152:10  
initial (1) 174:8  
initially (1) 91:12  
initiative (1) 180:21  
inject (2) 1:17 34:15  
injected (4) 58:5 93:5  
97:21,22  
injecting (7) 5:11 35:10  
39:12 84:25 96:22  
100:2 143:16  
injection (6) 40:22 92:3  
98:2 103:3 138:22  
144:19  
injections (1) 137:18  
inputs (1) 49:4  
inquiry (1) 152:7  
inscope (1) 190:7  
insecure (2) 145:11,12  
insert (14) 1:17 34:15  
84:22 113:21 114:14  
115:15 120:14 123:5  
136:17 140:2 142:4,14  
143:1 160:15  
inserted (26) 40:20 41:6  
45:13,19 46:2,6 88:5  
92:8,12 94:1 112:19  
114:8,12,20 115:2  
116:7 117:9 118:12  
120:5 122:12 125:25  
128:4 137:11,13  
149:19 158:9  
inserting (12) 27:7  
35:10 39:12,14,19  
107:13 111:3 113:7,8  
127:24 134:2 136:15  
insertion (35) 32:16  
40:4,15,22 46:20 91:2  
93:23 96:3 98:22  
99:2,6 103:15,18  
112:15,18 115:6  
116:22 117:16 118:18  
119:10 120:17  
121:1,19,22,24 122:6  
125:23 129:15,22  
130:24 133:8 136:14  
138:6,7,7  
insertiondeletions (1)  
67:5  
insertions (10) 12:19  
40:23 67:7 84:17 94:7  
103:1 117:12 133:16  
137:17 138:3  
insertionsdeletions (1)  
66:19  
inserts (1) 139:3  
insofar (1) 102:9

instance (1) 30:16  
instances (2) 94:23  
161:19  
instead (5) 58:15,19  
73:1 157:19 158:19  
instruction (1) 130:8  
instructions (4)  
126:5,18 127:3 150:18  
integrity (1) 83:18  
intelligent (3) 19:17  
21:5 161:15  
intend (1) 118:23  
intended (3) 65:10  
85:19 118:24  
intent (1) 77:8  
intention (5) 58:3 59:5  
83:21 84:5 117:2  
interconnection (1)  
49:2  
interest (1) 24:19  
interested (2) 69:14  
187:8  
interesting (3) 106:7  
170:7 177:21  
interface (1) 48:20  
interpretation (1) 46:24  
interrogate (1) 17:13  
intervened (1) 57:20  
intervention (1) 157:21  
into (52) 4:16 16:7,9  
21:12 30:23 31:16  
39:19,23 45:19 47:23  
49:11 57:18 58:5  
72:23 73:2 74:2 82:3  
83:19,25 84:22 91:12  
93:5 94:11 96:23  
97:21 104:24 106:14  
107:4 109:8,13 111:3  
115:6 120:14,17  
121:12,20,23,24  
122:6,12 127:24  
130:24 133:21 136:18  
139:5 140:3 142:15  
146:23 147:4 149:20  
158:24 180:25  
intrinsic (2) 71:17 155:4  
introduce (1) 53:15  
introduced (5) 31:16  
58:23 60:2,4 160:20  
introduces (3) 54:20,21  
55:1  
invariably (1) 20:14  
investigate (2) 76:12  
91:13  
investigated (3) 105:11  
195:1 196:22  
investigation (5)  
75:6,9,13,22 107:25  
invite (1) 107:23  
invoked (2) 34:4,4  
involve (7) 42:16 85:14  
87:16 90:2,2 92:16  
155:7  
involved (6) 89:21,24  
98:22 100:1 119:10  
149:21  
involves (7) 25:16,17,20  
112:4 121:16 132:23  
152:5  
involving (2) 84:25  
147:24  
irrelevant (2) 147:3  
187:12

isnt (59) 2:19 8:21  
 13:15 15:10 20:1,18  
 21:6 24:13 31:2 32:4  
 34:3 36:14 37:11  
 40:25 42:7 48:20 53:5  
 55:20 59:16 60:17  
 61:4,20 62:10 66:2  
 69:17 70:21 77:9  
 89:24 94:1 95:2  
 103:11 105:21 112:3  
 114:4,21 115:3 116:23  
 119:5 121:23 125:4  
 136:1 137:4 143:15  
 149:23 151:16 152:13  
 155:12,22 159:13  
 160:19 164:2 165:13  
 168:9 180:8 190:18  
 193:4 195:7,25 196:14  
 isolation (1) 185:1  
 issued (1) 44:20  
 issues (21) 1:11 9:13,14  
 14:2 15:6 39:9 43:5  
 44:4,6 45:22,24 47:19  
 69:1 70:10 110:14  
 111:1 137:17 151:5  
 193:20 195:1,17  
 issuing (3) 28:8 52:8  
 89:8  
 item (3) 64:11 92:1  
 174:24  
 items (1) 101:14  
 its (35) 4:22 20:11  
 32:13 33:8 38:24  
 52:19 55:8,21  
 56:19,20 59:5,5 62:4  
 64:15 65:8,12,13  
 79:19 80:14 89:8  
 100:4 105:21 129:15  
 134:11,12 139:22,25  
 143:24,25 144:7  
 145:12 162:13 177:7  
 188:24 196:25  
 itself (16) 2:24 36:25  
 37:11 44:18 50:16  
 58:18 80:15 90:11  
 107:5 114:25 126:9  
 139:17 148:12 151:2  
 172:24 184:8  
 ive (4) 132:7 157:25  
 159:4 164:22

**J**

january (1) 12:11  
 jason (2) 1:3 201:2  
 jenkins (2) 154:17 159:3  
 joint (9) 14:11 34:12,23  
 35:3,21 71:23 77:16  
 132:9 192:4  
 jot (1) 178:18  
 journal (9)  
 139:11,13,15,17,18,21  
 142:17,17 143:18  
 judge (2) 41:22 174:12  
 judgment (3) 39:17  
 178:17  
 judgments (1) 196:24  
 june (5) 1:1 3:19,19,21  
 200:12  
 junior (1) 101:13  
 juniors (1) 46:22  
 justification (1) 115:17  
 justified (1) 179:5  
 justify (1) 167:7

**K**  
 keep (1) 191:24  
 keeps (1) 148:19  
 keil (3) 106:10 110:13  
 120:21  
 kel (10) 150:1,2,2,11,17  
 151:4,14,21 152:18  
 153:18  
 kels (1) 161:13  
 key (17) 163:25 165:22  
 166:3,13 167:8  
 169:5,7 170:14  
 173:6,21 177:7  
 178:2,25 182:5,18  
 185:17 186:12  
 kiel (1) 124:19  
 kind (14) 2:9,12 18:18  
 55:12 64:18 65:6 69:2  
 74:24 99:2 104:11,11  
 145:4 184:14 187:8  
 kindly (2) 110:19  
 137:20  
 kinds (2) 59:13 146:10  
 know (2) 75:23 127:4  
 know (39) 4:8 10:4  
 13:12 17:9 27:9,19  
 29:4 30:2,5 61:9 62:15  
 64:17 67:21 75:25  
 76:6 80:2 81:9 87:21  
 88:13 89:24 99:4  
 100:15 108:10  
 117:17,18  
 119:5,7,13,14 120:10  
 125:14 132:21 139:20  
 148:24 162:13 164:18  
 183:5 192:14 199:19  
 knowing (1) 8:5  
 knowledge (2) 1:22  
 76:10  
 known (4) 8:20 10:18  
 48:7,10  
 knows (1) 90:17

**L**

lack (2) 113:21 187:3  
 lacked (1) 182:23  
 large (4) 21:10 41:14  
 70:2 109:8  
 largely (1) 187:11  
 larger (1) 114:12  
 last (8) 19:8 29:11  
 62:2,2 121:5 154:10  
 165:2 184:17  
 latched (2) 129:18,21  
 late (1) 9:20  
 later (12) 28:13 32:20  
 131:6,12 174:2,4,16  
 176:16,19 177:1 178:8  
 190:21  
 lax (3) 15:17,21,22  
 lay (2) 10:25 47:19  
 laying (3) 33:25 35:18  
 86:19  
 leads (1) 43:15  
 leap (1) 165:19  
 learned (5) 23:11,13  
 78:22 86:22 200:5  
 least (2) 47:22 96:10  
 leave (6) 92:8 100:13  
 138:23 152:22  
 leave (1) 167:7

leaving (1) 186:25  
 led (3) 57:14 168:21  
 187:4  
 left (6) 16:17 30:19  
 126:14,20 138:2  
 144:17  
 lefthand (1) 189:13  
 legacy (18) 5:14 26:12  
 32:23 40:24 77:15,19  
 79:4 92:3 100:6 103:2  
 123:7 133:6,12 134:22  
 138:2,13,18 143:11  
 length (2) 36:7 192:3  
 less (10) 4:13,24 12:4  
 29:12,13 31:19,19  
 94:19 141:22 200:8  
 let (15) 15:9 23:13 31:1  
 39:11 51:2 57:14,17  
 64:8 78:21 88:20 95:8  
 140:18 146:12 176:11  
 193:22  
 lets (47) 2:6 5:9,21  
 17:21 23:8 25:11  
 29:13 34:11 36:12  
 37:16 41:7,8 43:5  
 47:25 53:9 58:14  
 70:13 77:14,14 78:15  
 92:22 104:4 115:8,8  
 120:3 127:17 135:9  
 138:10,15,15,23  
 156:19 161:12 163:17  
 164:24 167:20 168:15  
 172:1 173:4 174:16  
 179:16 181:25  
 188:11,21 189:6 193:1  
 197:10  
 letter (21) 163:2,17  
 164:9,10,14 165:13  
 167:15 171:1,8,9,11  
 172:2,22,24,24  
 177:9,23 179:1 184:25  
 186:13,24  
 level (5) 6:12 88:25  
 115:5 118:10 179:2  
 liability (1) 25:11  
 life (4) 30:2 32:13 100:6  
 140:21  
 light (4) 71:4 76:24  
 86:25 140:9  
 like (36) 1:10 9:8 19:23  
 26:19 28:5 32:19 39:3  
 47:11 48:4 49:18  
 61:22 63:23 65:2,3  
 66:15 70:1 76:2 88:8  
 110:20 119:16  
 122:17,21 130:9  
 134:5,24 136:3,8  
 140:5 165:19 167:13  
 171:21 185:25 186:9  
 187:16 199:13 200:1  
 likelihood (2) 66:6 91:8  
 likely (7) 4:13 7:15  
 26:10 57:7 60:5 66:3  
 99:13  
 limited (3) 16:12 74:8  
 177:22  
 line (29) 47:2 64:5  
 88:23 106:11,15,24,25  
 107:7 111:9  
 113:8,17,19 115:13  
 124:23 128:9  
 133:5,18,21,23,24  
 136:11 144:19 145:21  
 186:20,21

152:1,17 157:4  
 168:19,25 190:12  
 lines (4) 18:5 42:12  
 104:18 133:12  
 list (12) 43:14 81:18,18  
 85:6 86:2,3 101:15  
 150:17 173:5  
 181:2,7,16  
 listed (1) 166:3  
 lists (1) 181:11  
 literally (2) 14:9 131:12  
 litigation (1) 10:1  
 little (3) 4:17 99:7  
 190:19  
 live (3) 78:11 118:6  
 119:2  
 lob (1) 187:7  
 lobbying (1) 187:10  
 locally (1) 115:24  
 log (7) 5:25 94:13,14  
 139:9,15,18,22  
 logged (2) 148:21,21  
 logger (1) 104:5  
 logic (1) 127:7  
 logs (2) 157:25 174:9  
 london (1) 199:20  
 long (6) 39:11 61:25  
 141:12,16 168:9  
 171:25  
 longer (1) 160:3  
 look (51) 7:7 19:11  
 23:2,7,19 25:8 34:11  
 61:19 76:13,19 81:14  
 87:5 91:19,25 92:22  
 96:10 99:11 102:11  
 104:4 109:11 114:14  
 115:8,8 119:23 124:3  
 132:6 138:15 139:12  
 146:2,5 154:12 159:4  
 163:17 164:17 167:25  
 168:17 169:17 173:5,8  
 174:16 175:9 176:1,2  
 178:8,9,10 188:12  
 189:24 191:19,20  
 196:10  
 looked (12) 17:5 37:6  
 49:14 91:1 98:4 99:20  
 121:21 123:10 176:19  
 178:12 182:24 196:9  
 looking (21) 1:10 11:16  
 19:14,15 29:6 46:23  
 48:22 59:7,7 63:21  
 76:7 99:7,8 101:17  
 109:13 120:1 124:2  
 136:25 161:19 179:12  
 191:16  
 looks (18) 10:7 36:21  
 50:5,6 55:14,14 93:22  
 109:8,16,20,23  
 117:14,17 136:8  
 148:11 157:18 158:2  
 173:2  
 loose (2) 84:4 134:4  
 lordship (8) 53:19  
 100:25 101:5,10  
 131:4,7 191:23 200:6  
 lordships (1) 142:24  
 loss (13) 103:15,17  
 112:9,11,14 113:4  
 121:3 124:10  
 127:12,13 128:16  
 129:16,23  
 lot (8) 98:14 103:8

120:12 163:14,20  
 169:25 198:22,24  
 lots (4) 52:18 58:11  
 161:14 198:25  
 loud (1) 146:7  
 love (1) 199:15  
 low (9) 29:6 55:18  
 59:15,16 85:19,21  
 100:2,3,16  
 lower (1) 94:24  
 luckily (1) 199:18  
 lunchtime (3) 63:12,24  
 135:22

**M**

machine (7) 33:9 34:8  
 42:25 84:8,25 87:20  
 137:1  
 machines (1) 42:21  
 main (5) 51:2,3 113:20  
 150:1 171:9  
 maintain (1) 5:25  
 maintained (2) 5:14  
 70:15  
 maintenance (1) 194:7  
 majority (3) 54:17 93:7  
 199:3  
 makes (4) 22:24 69:22  
 71:15 172:12  
 making (18) 7:3 12:16  
 23:4 44:23 53:24 55:8  
 59:3 68:14 92:18 96:9  
 122:19 123:19  
 127:14,15 179:10,11  
 184:3 198:16  
 manage (2) 88:4 168:16  
 managed (1) 195:15  
 management (42)  
 49:16 96:21 104:8  
 111:19 163:2,17  
 164:2,5,9 165:15  
 167:22,25  
 168:18,21,24  
 169:8,11,12,19  
 170:3,9 171:1,11  
 172:2,25 173:8,11,16  
 175:5,10 176:8  
 177:9,23 180:18,21  
 181:6,9,10 184:25  
 186:24 190:14,15  
 managers (1) 168:25  
 manages (1) 190:8  
 manipulating (1) 42:3  
 manual (14) 28:11 46:5  
 71:8,9 78:5 80:21,23  
 81:21 132:24,25  
 152:7,13 171:18 183:4  
 manually (7) 39:14  
 42:3,12 68:2 88:3  
 147:21 148:4  
 many (19) 8:6 17:10  
 33:22 35:16 39:9  
 52:17 55:24 59:16  
 61:8 84:10,13 85:1  
 100:15 101:14 135:15  
 145:13 150:10 177:24  
 196:23  
 march (4) 14:12  
 140:20,23 157:16  
 marked (5) 147:20  
 148:3 164:18 174:20  
 180:14  
 marker (1) 149:2

markers (1) 153:7  
 master (2) 74:25 77:11  
 material (8) 10:7,9,22  
 17:13 102:3 172:14  
 186:18 196:23  
 matter (7) 13:19 23:11  
 24:19 103:11 108:17  
 122:14 127:7  
 matters (5) 4:25 14:20  
 100:2,3,16  
 lower (1) 94:24  
 luckily (1) 199:18  
 lunchtime (3) 63:12,24  
 135:22

134:3,4,8,11  
 136:18,24,25  
 137:1,2,5,14  
 messagestores (4) 5:14  
 32:22 42:22,22  
 met (1) 23:19  
 methods (1) 89:8  
 mgt (1) 104:6  
 midday (1) 128:18  
 middle (4) 106:12,17  
 113:18 169:9  
 might (32) 4:8 5:1 9:4  
 13:21 16:3 20:20  
 22:17 31:5 37:4 45:6,8  
 46:22 47:10 63:1  
 74:12 77:8 78:17,19  
 81:16 83:3,22 84:6  
 89:1 122:19 150:5  
 157:20 171:24 174:7  
 178:17 185:1  
 191:15,22  
 migrated (2) 156:21  
 158:13  
 migration (5)  
 158:9,14,20 160:20  
 180:25  
 million (3) 29:10 30:1  
 183:12  
 millionodd (1) 32:12  
 millions (1) 66:9  
 mind (11) 3:20 14:1  
 26:9 28:21 47:18  
 76:24 85:11 91:18  
 102:1 150:4 195:8  
 minority (1) 60:3  
 minute (3) 112:21  
 117:6 131:12  
 minutes (17) 1:10 61:23  
 62:1 63:2,25 122:21  
 132:7 138:5 163:3,19  
 170:9 177:2 182:24,25  
 184:17 187:16 200:4  
 mirror (2) 32:24 33:8  
 misheard (1) 44:16  
 misleading (2) 68:7,8  
 mismatch (5) 107:20  
 108:5,8,13 115:21  
 mismatched (1) 110:15  
 mismatches (1) 107:24  
 missed (3) 81:8 105:2  
 133:11  
 missing (5) 64:17  
 87:14,23 113:19  
 125:19  
 mistake (15) 51:10 59:3  
 65:8,11,12,20  
 68:14,15 83:11,11  
 84:6 118:7 171:24  
 179:7 190:24  
 mistaken (1) 83:23  
 mistakes (3) 30:9 54:13  
 56:12  
 misunderstanding (2)  
 102:17 181:23  
 misunderstandings (1)  
 181:25  
 misunderstood (1) 45:4  
 misused (1) 77:6  
 mitigate (1) 166:10  
 mm (15) 4:23 12:6  
 14:17 42:11 50:4  
 58:8,13 70:18 75:21  
 120:6,25 157:12

161:17 178:1 198:2  
**mode (1)** 120:22  
**modification (5)** 36:2  
 78:9 92:19 138:9  
 155:3  
**modifications (5)** 52:14  
 68:9 140:11 141:24  
 195:21  
**modified (5)** 69:24 77:8  
 160:25 196:4 197:14  
**moment (15)** 39:5  
 44:15,22 61:21 62:25  
 78:16 82:22 100:22  
 103:4 170:21 174:20  
 179:14 187:15 191:10  
 199:12  
**money (4)** 2:8 75:10,15  
 155:23  
**monies (1)** 72:4  
**monitor (1)** 183:15  
**monitored (3)** 194:25  
 195:5,16  
**monitoring (13)** 104:14  
 171:18,23 173:13  
 175:4 177:17  
 180:18,23  
 181:1,4,7,14 183:15  
**month (3)** 14:12 62:21  
 152:15  
**monthly (2)** 176:7  
 183:5  
**mooted (1)** 27:15  
**more (23)** 5:1,9 6:12  
 57:7 61:23 64:11 73:7  
 77:6 84:12 100:5,9,12  
 142:4 152:4 156:11  
 157:22 175:13,16,17  
 176:1 183:15 188:5  
 200:8  
**morning (9)** 1:5,6,7,8  
 101:9,22,25 122:22  
 172:5  
**most (5)** 4:5 19:25 87:4  
 130:17 198:18  
**mostly (1)** 164:3  
**move (18)** 5:21 15:9  
 17:2 25:11 39:11  
 70:13 77:14 85:24  
 86:1,4 95:8 130:6  
 135:9 138:10 140:5  
 161:12 165:18 169:7  
**moved (1)** 39:6  
**movements (1)** 22:16  
**moving (3)** 25:10 83:17  
 95:7  
**ms (3)** 114:7 131:25  
 150:17  
**msc (3)** 109:1,4 181:16  
**mscs (10)** 12:2,7 17:11  
 18:23 19:5 20:24,25  
 22:5 26:16 161:14  
**msu (6)** 104:6,10,15  
 109:5,5,17  
**msuindt (1)** 104:6  
**much (17)** 4:13,24  
 72:19 78:20 101:10  
 113:12 119:7 136:5  
 154:5 178:22 183:1  
 184:6 189:22 191:23  
 192:10 193:21 200:9  
**multiple (1)** 181:13  
**multiplied (1)** 32:4  
**must (7)** 50:5 109:3

113:24 129:22,23  
 152:4 186:22  
**myself (4)** 24:17 27:12  
 99:6 200:3  


---

**N**

---

**name (4)** 13:11 20:22  
 105:16 144:7  
**namely (4)** 30:13 60:22  
 69:1 97:23  
**names (2)** 21:17 22:3  
**narrow (1)** 134:6  
**nature (8)** 18:8,14,15  
 21:7 47:19 96:3 127:9  
 150:24  
**nearly (1)** 109:15  
**necessarily (7)** 18:15  
 89:6 145:14,16  
 155:2,17 198:23  
**necessary (8)** 52:7,25  
 79:3 102:9 145:4  
 147:1 162:11 185:24  
**necessity (1)** 83:24  
**need (26)** 6:24 7:25  
 17:24 27:2 35:1 53:7  
 64:24 72:18 73:7 76:4  
 77:10 78:5,8 79:22  
 103:9 125:19 132:4,8  
 140:8 143:14  
 149:19,19 152:8 159:4  
 161:10 190:3  
**neednt (1)** 24:24  
**needs (12)** 20:20 37:5  
 38:20 59:22 60:11,22  
 145:9 147:21 148:4  
 152:7 153:10 184:5  
**negate (2)** 115:15  
 154:22  
**negative (2)** 185:1  
 186:23  
**negotiation (1)** 172:13  
**neither (1)** 117:23  
**net (3)** 16:4 111:8 128:8  
**network (3)** 79:16  
 146:14,15  
**networks (3)** 195:15,22  
 196:20  
**never (5)** 15:18 35:16  
 136:12 148:21 162:16  
**nevertheless (1)** 179:22  
**newly (1)** 158:13  
**news (2)** 8:16 81:7  
**next (14)** 3:6 4:9 17:3  
 36:23 87:6 92:1  
 93:19,19 144:5 158:16  
 159:20,20 175:2  
 190:16  
**night (2)** 75:5 122:3  
**nobody (1)** 127:4  
**nomenclature (1)** 5:9  
**none (2)** 10:22 153:1  
**nonstandard (1)** 92:18  
**nor (3)** 117:23 133:9  
 137:24  
**normal (1)** 172:17  
**note (5)** 103:10 113:24  
 142:24 159:5 169:9  
**noted (15)** 13:10 112:8  
 128:15 175:5,21  
 180:1,22 181:16  
 190:1,13,19 191:1  
 193:12 197:4 198:6  
**nothing (13)** 41:16 57:3  
 72:13,15 95:23 110:4

122:16,19 153:13  
 170:15 173:23 177:4  
 184:13  
**notice (2)** 44:20 46:6  
**noticed (1)** 101:1  
**notices (7)** 43:17 44:18  
 45:1,3 46:12,16 47:11  
**notified (1)** 112:10  
**noting (1)** 110:14  
**notify (1)** 87:12  
**noting (1)** 110:14  
**notion (2)** 69:20 119:10  
**november (2)** 115:12  
 181:17  
**nowhere (4)** 14:18,24  
 68:11,12  
**number (63)** 6:21 7:6  
 14:15,18,21 16:8,13  
 18:15,19 21:10 22:8  
 29:4,9,12 31:23 33:19  
 41:14 61:5,6,14,17  
 62:13,15,19,21,23  
 63:21 72:7,24 80:14  
 82:24 83:4,4 92:10  
 94:8,10,13,14,15,18,22,24  
 96:16 100:1,3 101:19  
 109:8 132:11,13  
 135:10,11 142:22  
 146:12 147:8 150:7  
 156:25 161:7,23,25  
 176:21 179:23 180:10  
 188:21  
**numbering (3)** 62:7  
 81:21,25  
**numbers (1)** 100:8  
**numerical (1)** 18:19  


---

**O**

---

**objecting (3)** 60:23  
 65:21,21  
**objection (2)** 81:13 86:9  
**objections (1)** 60:24  
**objective (18)** 172:16  
 189:6,8 190:23  
 193:2,23  
 194:4,10,15,23  
 195:3,14,20  
 196:3,9,10,19 197:13  
**objectives (6)** 188:21  
 189:2 193:10,15,19  
 198:18  
**obliged (2)** 101:10  
 191:23  
**observation (3)** 124:4  
 125:16 174:8  
**observations (3)** 179:17  
 196:16 198:21  
**obtained (3)** 12:1  
 87:20,22  
**obvious (3)** 10:14 54:17  
 119:17  
**obviously (6)** 59:11  
 75:2 87:16 132:5  
 170:13 174:2  
**occasion (5)** 3:8 7:12  
 88:8,18 137:8  
**occasions (13)** 7:20  
 26:3,24 28:22 29:19  
 33:24 84:11 85:1  
 97:22 98:21 100:1,5  
 137:10  
**occur (4)** 13:12  
 54:13,14 147:11  
**occurred (1)** 37:4

**occurrence (1)** 113:10  
**occurrences (2)** 20:12  
 94:18  
**occurring (1)** 19:9  
**occurs (2)** 52:17 148:14  
**oclock (6)** 63:10,16,23  
 101:23 102:20 110:6  
**ocp (21)** 107:16 111:5,6  
 112:15 114:8,16 115:9  
 121:21,22 123:9,23  
 124:1 125:20  
 128:20,20 129:1,6  
 130:22 131:5,12 159:5  
**ocps (17)** 8:14 11:6  
 12:4,10 14:16 17:10  
 18:23 19:4 20:24,25  
 21:12 22:5 26:15  
 114:21 115:4 130:17  
 161:14  
**ocr (24)** 105:14,18  
 114:17 120:3,4,8  
 121:16,23,25 122:9  
 123:17 124:2,13 125:7  
 126:3 129:1,4,10,18  
 130:20 131:3,10,17,20  
**ocrs (15)** 8:13 11:6  
 12:4,10 14:16 17:10  
 18:23 19:4 21:12 22:5  
 114:21 115:4 123:22  
 130:18 161:14  
**offer (1)** 166:1  
**office (100)** 4:19 5:2  
 6:9,11,18 7:3 9:25  
 23:2 27:7,21 28:8  
 38:24 43:16 44:21  
 47:25,25 48:3,4 49:16  
 50:3,5,16 52:2,3,8,25  
 53:3,7 55:13,15  
 56:12,21,24  
 57:7,10,16 58:20  
 59:6,23 60:5  
 65:12,15,17 68:14  
 72:9 73:15,20,21  
 76:17 79:19 87:12,17  
 89:7 90:9 91:12,13  
 104:24 111:19 114:25  
 134:9 136:23  
 157:15,16 158:1  
 166:2,6,10,10,15  
 167:1,8,16 168:7,11  
 169:4 170:5,15  
 172:8,23 174:18  
 176:15,16 177:6  
 178:3,14,17 179:2  
 181:21 182:22  
 184:2,18 185:13  
 186:11 187:7,8,22  
 195:9 198:20 199:1,8  
**offices (12)** 56:20  
 74:1,2 174:5 177:19  
 179:4 184:21 185:22  
 186:11 188:7,14  
 198:17  
**often (25)** 2:17 12:25  
 15:15 17:3,25  
 18:4,10,11,16  
 19:15,25 21:18 22:7  
 25:17 27:2,3,9 31:2  
 36:4 38:22 40:14  
 48:10 56:16,22 142:5  
**oh (1)** 162:16  
**ok (1)** 158:2  
**okay (18)** 5:12 11:1

33:24 35:16,17 36:11  
 40:11 41:7 44:10,14  
 57:13 61:13 66:13  
 93:22 108:20 136:6  
 177:16 192:11  
**old (1)** 117:23  
**oldfashioned (1)** 63:14  
**omission (1)** 84:9  
**omitted (1)** 181:4  
**once (14)** 27:14 49:13  
 52:18 60:13 111:22  
 112:5 118:25 128:14  
 142:5,14,25 143:1  
 147:3,4  
**ones (3)** 124:14  
 156:13,14  
**onesided (1)** 126:21  
**online (14)** 5:15 26:13  
 33:25 37:17 40:6,11  
 48:2 138:15,21,24  
 140:21 143:11 156:22  
 187:24  
**onside (1)** 149:21  
**onto (5)** 32:20 78:10  
 129:18,21 131:5  
**onwards (1)** 74:3  
**opened (2)** 140:23  
 141:1  
**opening (13)** 2:22  
 3:5,11,13 4:25 83:16  
 155:9,11,12,19  
 159:19,20 160:6  
**operate (1)** 34:7  
**operated (7)** 6:17 9:8  
 51:5 104:14 136:24  
 171:19 196:25  
**operating (4)** 56:14  
 70:17 149:3 189:10  
**operation (2)** 155:6  
 159:17  
**operational (2)** 4:14  
 105:19  
**operations (4)** 51:7  
 154:22 155:3 195:4  
**operator (1)** 191:21  
**opinion (3)** 77:5 165:22  
 188:24  
**opportunities (1)**  
 179:23  
**opportunity (8)** 91:19  
 95:11 166:1,7 177:6  
 178:4,15 182:8  
**opposed (1)** 30:14  
**opposite (7)** 65:9 111:4  
 113:22 114:9 116:17  
 127:25 128:4  
**option (1)** 93:6  
**options (2)** 27:20 108:9  
**oral (1)** 6:15  
**order (17)** 30:8 32:8,15  
 50:23,25 53:14 56:24  
 60:12 66:1,1 68:13  
 149:5 154:21 182:2  
 184:10 185:21 192:18  
**ordinary (1)** 41:9  
**original (6)** 91:2 111:20  
 115:16 116:10,14  
 128:10  
**others (3)** 76:14  
 156:16,17  
**otherwise (2)** 62:1  
 126:24  
**ought (3)** 85:10,23

86:20  
**outage (1)** 146:15  
**outcome (3)** 16:4 27:9  
 31:2  
**outline (1)** 17:20  
**outlined (3)** 33:16  
 43:11 165:24  
**outside (2)** 40:12 41:18  
**outsourcing (1)** 167:21  
**outstanding (5)** 105:16  
 147:17,20,25 148:4  
**over (30)** 14:12 17:7  
 25:3 29:11,18 32:13  
 33:24 36:8 46:3 55:16  
 63:12 70:3 85:4  
 117:22 118:16,20  
 125:18 145:22 148:8  
 149:3 157:5,10,13  
 160:4,6 168:8 173:23  
 185:3 198:5,18  
**overall (6)** 16:23 19:18  
 32:1,11 66:6 183:13  
**overlap (1)** 193:6  
**overnight (3)** 81:12  
 87:25 172:4  
**overruled (1)** 60:24  
**overview (1)** 199:10  
**overwhelming (1)** 91:8  
**own (10)** 4:22 14:19  
 64:15 73:2 79:19  
 85:13 88:3 89:8 99:19  
 111:15  


---

**P**

---

**pad (2)** 81:2,24  
**pages (4)** 91:20 167:22  
 169:1,23  
**paid (2)** 2:8 74:20  
**painfully (1)** 119:17  
**pairs (1)** 85:14  
**paper (4)** 56:15,16 88:3  
 174:21  
**paperwork (2)** 56:22,23  
**paragraph (43)** 34:14  
 45:5,6,10,14 46:3  
 66:19 67:14 71:24  
 72:2,13,18 76:20  
 78:23 93:4 96:19,25  
 97:1,6,15,20,24  
 98:10,21 99:1 103:10  
 127:22,22 132:16  
 138:19 139:12 140:7  
 141:23 154:13  
 164:7,24 165:20  
 166:17  
 170:10,11,17,19  
 179:18  
**paragraphs (10)**  
 67:13,22 68:6 91:20  
 92:24 99:25 146:6,9  
 152:23 158:4  
**parcel (1)** 132:22  
**pardon (1)** 130:23  
**parker (11)** 78:12,17,19  
 79:4 82:14 87:6 92:22  
 93:23 96:20 98:9,16  
**parkers (4)** 35:23 94:5  
 96:1 117:11  
**part (19)** 4:21 9:4 37:4  
 38:5,17 46:17 49:3  
 58:10 132:22 155:12  
 158:13,14,19 160:20  
 172:17 180:21 185:6  
 186:6 191:16

**particular (33)** 9:23  
 18:18 21:16,16  
 22:8,15,16,25 24:19  
 28:2 32:2,6,14 33:9  
 39:5 56:18 63:19  
 84:24 86:18,19 98:6  
 129:16 133:5  
 135:20,23 139:5,9  
 142:18 151:4 162:20  
 167:14 168:12 172:15  
**particularly (5)** 26:23  
 66:3 106:7 157:23  
 163:20  
**parties (5)** 48:3 55:22  
 74:23 126:22 152:6  
**partys (1)** 57:11  
**passed (2)** 73:15 91:1  
**passing (1)** 61:15  
**past (4)** 25:3 36:8 101:7  
 167:9  
**pause (11)** 67:19 91:23  
 92:25 101:21 163:23  
 169:9 180:12,16  
 187:15 189:19 193:9  
**paying (1)** 155:23  
**payment (11)**  
 72:21,21,23 73:1,1,24  
 74:4,15,18 75:7  
 108:13  
**payments (5)** 74:22  
 107:20 108:5,8 115:21  
**payroll (2)** 164:17,20  
**pc0142763 (1)** 135:11  
**pc0175821 (3)** 93:10  
 94:2 97:25  
**pc0197592 (1)** 154:15  
**peak (94)** 17:23 18:1  
 20:10,16 27:5,14,14  
 28:2,3,6,13,17,23  
 62:4,10 68:1 81:5  
 83:8,10 84:12  
 88:12,14,15,17,20,22,25  
 90:6,11,13  
 91:5,6,9,10,16  
 93:10,11,14,15,16  
 96:21 103:3,6,12,20  
 104:4  
 109:13,15,16,17,21,21,24  
 114:15,19 121:19,21  
 123:19,21,23,24  
 124:4,9 126:12  
 130:12,16,16 134:24  
 135:10,10,12,20 136:3  
 140:8,14,15,23  
 141:2,10,12,23  
 142:3,6,7,10  
 149:23,24,25 150:15  
 154:10,15 156:7 159:4  
 173:24  
**peaks (47)** 17:7,21  
 18:22 19:4,25  
 21:10,11,12 22:4  
 26:15 27:11,24 29:1  
 30:23 62:7,9,13,16  
 81:4 82:19 84:13,13  
 88:10,22 96:12 98:19  
 109:8 113:13 114:4  
 120:12 146:12 147:23  
 148:20,25 149:5,11,17  
 150:3,6,10 152:23  
 153:1 156:4  
 161:7,9,10,13  
**people (17)** 16:3 29:22

36:4 49:15 54:13  
 58:22 70:16 91:1  
 109:13 110:4 117:2  
 141:20 142:8 145:13  
 174:12 184:2 199:17  
**per (8)** 61:6  
 62:8,11,21,21 152:15  
 181:13 200:4  
**perceive (1)** 119:9  
**percent (1)** 66:11  
**percentage (2)** 31:20  
 66:9  
**perception (2)** 10:17  
 171:3  
**perfect (1)** 31:7  
**perform (1)** 25:1  
**performance (1)** 194:24  
**performed (2)** 187:22  
 188:17  
**performing (2)** 181:7  
 187:21  
**perhaps (24)** 15:5 16:2  
 24:1 28:9 29:19 43:10  
 48:22 62:24 67:12  
 76:20 82:5 91:20  
 92:23 95:8 100:13,14  
 108:11,12,25 140:18  
 163:23 171:17 189:18  
 193:8  
**period (24)**  
 3:6,17,21,25 11:21  
 29:18 33:24 74:8  
 126:16 158:16,24,25  
 159:10,12,15,20,21  
 160:1,12 161:23,25  
 162:1 188:15 198:6  
**periodic (5)** 174:24  
 175:3,6 176:6 194:12  
**permission (18)** 5:23  
 6:1,2,5,10,11,15,23  
 8:1 11:7 12:17 14:1  
 15:11 16:2,6 105:23  
 114:24 162:25  
**permissions (3)** 6:12  
 70:16 164:5  
**person (4)** 28:16 58:15  
 141:1,6  
**personal (1)** 71:25  
**peter (2)** 1:3 201:2  
**phone (2)** 74:20 108:19  
**phones (2)** 60:17 90:20  
**physical (1)** 80:1  
**physically (1)** 79:16  
**pick (4)** 1:13 34:13  
 45:14 66:15  
**picked (6)** 52:22 55:13  
 91:9 105:5 107:1,24  
**picks (1)** 109:12  
**picture (1)** 185:4  
**piece (3)** 28:1 133:18  
 174:20  
**pilot (4)** 156:22  
 158:13,19 160:21  
**place (18)** 19:22 21:25  
 25:17 27:22 38:11  
 42:10 79:18 83:10  
 105:3 113:25 120:2  
 146:17,20 165:14  
 177:18 180:2 183:23  
 194:8  
**plainly (1)** 158:21  
**planned (1)** 176:6  
**platforms (2)** 189:10

190:6  
**pleadings (2)** 44:1,2  
**please (33)** 1:12 16:15  
 34:13 42:20 50:25  
 57:14 66:15 67:15  
 92:24 93:19,20,20,21  
 95:16 103:5 105:15  
 113:23 114:15 124:3  
 127:17 132:9,11 135:4  
 146:5 156:20 163:19  
 164:7 170:21 175:18  
 187:15 188:12  
 191:24,25  
**plural (1)** 170:12  
**pm (13)** 64:3 72:8  
 101:6 102:11,21,23  
 154:2,6,7,9 200:5,7,10  
**pmmc (1)** 79:22  
**pointed (1)** 98:7  
**points (9)** 13:18 103:12  
 114:3 130:8 166:24  
 167:4,5 171:10 172:21  
**pol (10)** 111:5 112:11  
 113:21 128:1 168:23  
 169:20 173:14 180:22  
 190:10,12  
**polf (1)** 117:24  
**polfs (18)** 48:4 104:21  
 105:16 111:9,9 113:23  
 115:14,23 116:1  
 120:18,21 123:14  
 124:19 126:7,10,11  
 128:9,9  
**polffsummariesincomp (1)** 120:15  
**policies (1)** 195:11  
**policy (2)** 190:7,16  
**polmis (2)** 111:18  
 128:10  
**poloperated (1)** 179:21  
**pols (1)** 110:25  
**polsap (11)** 48:4 174:24  
 175:7 177:19 179:25  
 180:4,24 181:3 187:23  
 188:15 197:18  
**poor (5)** 163:8,9,12  
 183:23 184:1  
**portion (1)** 87:9  
**portions (1)** 70:2  
**position (38)** 2:22  
 3:11,13 8:15 9:17,19  
 10:15,16,24 20:13,14  
 24:13 26:2 33:16  
 56:25 57:8,11 86:13  
 93:8 98:9,11,20,23,24  
 99:24 111:16 149:16  
 155:21 160:7 161:1,3  
 167:17 182:21,22  
 183:23 184:1 185:23  
 198:11  
**positions (1)** 25:15  
**positive (1)** 118:5  
**possibility (4)** 27:15  
 31:9 52:8 87:15  
**possible (17)** 5:1 21:6  
 22:11 24:4 25:5 54:14  
 70:16 71:9 72:6 75:14  
 77:23 79:5 85:6 91:4  
 132:22 133:16 146:8  
**possibly (4)** 16:14 56:5  
 70:6 106:8  
**post (105)** 4:19 5:2  
 6:9,11,18 7:3 9:25

23:2 27:7,21 28:8  
 38:24 43:16 44:21  
 45:4 47:25 48:3,4  
 49:16 50:3,5,16  
 52:2,3,8,25 53:3,7  
 55:13,15  
 56:12,20,21,24  
 57:7,10,16 58:20  
 59:6,23 60:5  
 65:12,15,17 68:14  
 72:9 73:15,21 74:1,2  
 76:17 87:12,17 89:7  
 90:9 91:12,13 104:24  
 111:19 114:25  
 166:2,6,10,10,15  
 167:1,8,16 168:7,11  
 169:4 170:5,15  
 172:8,23 174:5,18  
 176:15,16 177:6,19  
 178:3,14,17 179:2,4  
 181:21 182:22  
 184:2,18,21 185:13,22  
 186:11,11 187:7,8,22  
 188:7,14 195:9  
 198:17,20 199:1,8  
**postmaster (14)** 57:12  
 60:14,16,23 65:20  
 68:16,17 90:21 103:21  
 104:10 108:15,19  
 117:14,18  
**postmasters (7)** 5:4  
 31:16 55:25 57:8  
 60:23 104:1 155:21  
**potential (5)** 1:19  
 25:10,14 87:13 194:25  
**potentially (1)** 59:19  
**power (1)** 136:19  
**powerful (1)** 154:24  
**powers (3)** 77:6  
 145:1,15  
**pqty1000 (1)** 116:15  
**pqty2080 (2)** 120:23  
 126:8  
**practical (10)** 2:3,11  
 15:20 16:4,22 17:4,6  
 32:14 42:7 134:1  
**practice (9)** 40:7 54:12  
 60:8 75:25 82:14 94:6  
 96:2 103:25 151:6  
**practiced (1)** 182:25  
**precisely (7)** 61:9 91:4  
 114:23 116:21 118:22  
 119:13,14  
**prefer (5)** 52:4 60:5  
 62:20,22 100:17  
**prepared (1)** 93:23  
**preparing (1)** 100:19  
**prescribed (1)** 16:9  
**present (2)** 68:19 189:5  
**press (2)** 47:23 158:3  
**pressed (1)** 157:18  
**preston (1)** 199:19  
**presumably (3)** 73:11  
 87:20 156:13  
**presume (2)** 97:8  
 136:17  
**presumed (1)** 9:7  
**pretty (2)** 62:20 130:10  
**prevent (3)** 113:22  
 148:7,8  
**preventing (1)** 149:2  
**previous (7)** 3:11 17:5  
 76:21 144:3 154:22

160:11 167:5  
**previously (2)** 17:9  
 116:12  
**price (2)** 2:8 83:6  
**principal (1)** 177:16  
**principle (2)** 111:13  
 174:11  
**principles (1)** 184:21  
**printed (1)** 158:2  
**prior (3)** 2:24 46:5  
 180:25  
**privileged (12)** 73:9  
 74:7,10 75:1  
 144:21,25 154:23  
 156:1 173:7 174:9  
 185:8,15  
**privileges (1)** 173:12  
**probably (8)** 38:8 57:5  
 91:10 93:15 100:7  
 118:14 143:21 150:12  
**problem (31)** 16:6  
 20:15 33:5 54:2 89:15  
 90:17,24 103:22  
 105:22,24 107:4,5  
 111:2,22 112:12  
 113:20 115:24,25  
 117:9 123:11,14  
 125:15 127:23 128:14  
 148:14 149:14 150:23  
 152:2 157:2,10 199:22  
**problems (10)** 42:21  
 53:11 105:9 106:4  
 113:23 123:11,21  
 141:22 145:24 195:9  
**procedures (3)** 25:24  
 177:7 195:11  
**proceed (2)** 147:20  
 148:13  
**proceedings (3)** 22:21  
 195:25 196:8  
**process (71)** 5:3 11:25  
 12:16 27:24 28:20  
 32:22 33:3,11 39:21  
 42:17,21,23 44:7  
 58:11 68:16 76:10  
 78:3 80:11 84:19,24  
 85:13 91:6,11 94:17  
 96:7 97:19 105:10  
 108:1,7,10,22 110:1,3  
 113:6 132:23 136:7  
 137:4,5 142:7 145:23  
 147:14,18 148:2,15  
 149:9 151:1,9,15  
 152:5,11,13,14,19  
 153:16 157:19 158:19  
 160:18,20 161:18  
 164:2 165:15 168:17  
 169:9,12,19 170:3  
 172:17 173:16 175:4  
 181:14 183:15  
**processes (6)** 51:4  
 85:13 104:14 195:8  
 198:12,18  
**processing (5)**  
 48:8,12,19 194:16,18  
**produce (3)** 31:25 39:18  
 107:20  
**produced (8)** 13:4 14:25  
 30:2 32:13 98:15  
 109:10 118:6 153:14  
**produces (2)** 102:4  
 109:1  
**product (2)** 83:7 120:22

**production (2)** 27:24  
 180:25  
**productno5129 (1)**  
 116:14  
**professional (1)** 76:1  
**program (2)** 180:23  
 194:1  
**programme (3)** 177:18  
 182:18 184:20  
**programming (1)** 39:1  
**programs (2)** 194:11  
 196:12  
**progression (1)** 105:15  
**project (3)** 156:22  
 168:20 173:10  
**propagated (1)** 49:16  
**proper (7)** 25:22 34:17  
 77:14 100:18,20  
 118:25 199:6  
**properly (12)** 40:25  
 60:1 112:5 113:20  
 157:16 180:14 189:11  
 194:2 195:22 196:6,13  
 197:16  
**property (1)** 94:2  
**proposal (10)** 170:23,25  
 172:2,7,14 176:23,25  
 177:13,14 184:13  
**proposals (1)** 178:20  
**proposed (1)** 171:22  
**proposing (3)** 159:6  
 167:12 180:11  
**protected (2)** 194:6  
 196:21  
**protection (2)** 6:2 60:21  
**provide (17)** 56:23  
 168:23 189:8 193:24  
 194:4,10,15,23  
 195:3,14,20  
 196:3,11,19 197:13  
 198:19 199:10  
**provided (5)** 65:22  
 100:20 135:17 173:13  
 176:7  
**provides (1)** 173:2  
**providing (1)** 186:18  
**provision (1)** 95:12  
**provisions (1)** 167:14  
**published (1)** 197:23  
**pull (1)** 35:13  
**purported (1)** 198:25  
**purpose (16)** 1:10 40:6  
 53:17,20,23  
 54:7,18,22 57:24  
 89:12 114:22,24  
 139:22,25 151:13  
 163:1  
**purposes (11)** 2:15 41:7  
 43:19 44:11 47:3  
 49:15 51:2,7 69:8  
 143:15 180:4  
**pursuant (1)** 123:9  
**pursue (1)** 61:22  
**pursuing (3)** 47:1,5,6  
**pushed (1)** 137:15  
**pushing (1)** 39:22  
**putting (7)** 15:3 86:18  
 122:8 124:14 125:11  
 130:8 177:12

3:2,8,13,17,23  
 4:2,7,11,13,19,24  
 5:4,9,14,17,20  
 6:5,10,16 7:1,12,19  
 8:6,9,11,15,21,24  
 9:1,3,10,12  
 10:1,4,11,21  
 12:4,7,10,14,16  
 13:3,7,14,17,25  
 14:11,15,18,24  
 15:5,9,17,24 16:12  
 17:2,9,13,21  
 18:1,5,13,17,22,25  
 19:4,10 20:8,13,24  
 21:5,15,21  
 22:2,10,12,18 23:1,8  
 24:8,13 25:6,10,20  
 26:2,9,15,20 27:11,23  
 28:1,5,15,21 29:6,9,16  
 30:7,11,20,25  
 31:3,7,14,19,22  
 32:8,21  
 33:2,8,17,22,24  
 34:7,11,19,22  
 35:1,6,10,13,18,25  
 36:3,6,12,25  
 37:8,12,16,24  
 38:3,12,16,22  
 39:11,17,24  
 40:2,7,13,17  
 41:7,14,20  
 42:1,3,6,12,14,16,21  
 43:2,16,15,21  
 44:1,11,15,25 45:6,22  
 46:1,12,16 47:22,25  
 48:7,10,12,15,18,20  
 49:1,3,6,9,11,13,19,25  
 50:3,5,9,11,14,16,19,22  
 51:2,7,14,18,21,25  
 52:3,7,20,25  
 53:5,9,14,17  
 54:1,6,11,15  
 55:4,10,20 56:1,6,14  
 57:3,13,17,22  
 58:2,7,9,14 59:1,25  
 60:10,16,21  
 61:1,8,11,13,19  
 62:7,13,17  
 64:11,13,21  
 65:4,6,12,17,20,24  
 66:6,11,13,17,22,25  
 67:5,10,12,17,21,25  
 68:11,23 69:10,19  
 70:1,13,19  
 71:3,12,16,21  
 72:13,18  
 73:6,9,11,17,21,24  
 74:6,14,17,24  
 75:9,14,22,25  
 76:4,16,19 77:2,14,19  
 78:12,15,18,20  
 80:1,6,10,13,23  
 81:1,4,6,11  
 82:5,14,17,24  
 83:6,14,21  
 84:4,10,16,20,24  
 85:6,9,16,22 87:19  
 88:7,10,13,16,20  
 89:3,9,12,17,19,23  
 90:7,14 91:7,17,25  
 92:6,14,22  
 93:2,4,10,14,17,25  
 94:5,11,20 95:2,4,10

96:8,12,18  
 97:8,11,15,17  
 98:8,14,20,25  
 99:12,19,24  
 100:4,9,16  
 103:1,8,20,25  
 104:4,9,14,17,23  
 105:2,5,7,13,21  
 106:1,4,9,17,20  
 107:3,9,11,19,22  
 108:3,11,17,19,21,23  
 109:1,5,12,17,22  
 110:1,3,6,24  
 111:8,13,18  
 112:1,3,8,17,21,25  
 113:4,6,12,15  
 114:7,11,16,21  
 115:3,8 116:4,9,14,21  
 117:1,5,19 118:3,15  
 119:4,8,16,25  
 120:3,7,12,20  
 121:1,5,10,15,21  
 122:3,11,14,21  
 123:4,7,9,14,17,21  
 124:1,5 125:21  
 126:2,5,14,18,24  
 127:3,17,22  
 128:3,7,14,20  
 129:2,10,13  
 132:12,14,16,18,21  
 133:4,9,16,18  
 134:1,15,22,24  
 135:12,16 136:16,21  
 137:7,16,24  
 138:10,15,21  
 139:2,5,8,12,15,18,22  
 140:1,5,23  
 141:1,4,6,10,15,23  
 142:9,12,20 143:20  
 144:2,5,11,17,21,23,25  
 145:3,7,10,14,18,21  
 146:5,12,17,20,23  
 147:3,7,13,17,23  
 148:2,7,17,20,25  
 149:5,9,17,24  
 150:4,6,8,12,17,21  
 151:3,8,11,19  
 152:4,22 153:1,6,11  
 154:15 155:1,10,14,25  
 156:4,7,9,13,17,19,25  
 157:10,13  
 158:7,12,19,23  
 159:2,12,17,19,23,25  
 160:3,6,9,14,23  
 161:6,12,18,23  
 162:5,10,14,16,24  
 163:7,11,17,25  
 164:6,13,17,24  
 165:2,8,13,18  
 166:12,21,25  
 167:7,12,20,25  
 168:4,7,11,15  
 169:3,7,17  
 170:7,21,23  
 171:5,8,11,14,16,21,25  
 172:11,21 173:4,20  
 174:1,4,11,16,23  
 175:14,17,19,24  
 176:2,11,15,18,23,25  
 177:4,13,21  
 178:2,12,25 179:9,20  
 180:7,10,20 181:25  
 182:4,8,13,20

Q

**q (728)** 1:9,25  
 2:5,11,14,18,22,24



<p><b>rmg (1)</b> 168:22</p> <p><b>robinson (86)</b> 1:4,5,7 11:23,24 23:13,23,25 24:3,24 46:21,25 47:6,9,15,16,17 61:24 62:2,24 63:6,13,18 64:4 81:20 86:4,17,21 87:5 95:20,22,25 97:1,5 100:21,24 101:2,5,10 102:1,6,24 124:7,10,14,16,22,25 125:6,9,12,17 129:5 130:6,13,19,22,24 131:2,4,7,14,20,24 132:3,7 135:5,9 136:1,12 143:4,8 153:20,25 154:10 179:15,16 190:4 191:21,23 192:15 193:1 197:10 199:15,25 201:3</p> <p><b>robust (3)</b> 32:12 173:17 181:14</p> <p><b>robustness (7)</b> 34:3 42:18 43:2 77:25 165:25 194:19 197:1</p> <p><b>rogue (1)</b> 159:23</p> <p><b>role (1)</b> 144:23</p> <p><b>roll (10)</b> 13:7 86:14 110:16 118:19 125:18 157:10,25 158:24 160:4,21</p> <p><b>rolled (3)</b> 117:22 118:16 119:20</p> <p><b>rolling (4)</b> 148:8 149:3 157:5 160:6</p> <p><b>rollover (12)</b> 103:23 107:19,23 108:5,7,13 118:24 120:1 125:17 154:16 157:15,19</p> <p><b>room (3)</b> 169:14 172:15 178:22</p> <p><b>round (1)</b> 82:2</p> <p><b>routinely (1)</b> 194:25</p> <p><b>rules (1)</b> 134:16</p> <p><b>run (4)</b> 100:7,17 118:4 189:18</p> <p><b>running (3)</b> 46:23 151:18 152:21</p> <p><b>runs (1)</b> 168:8</p> <hr/> <p style="text-align: center;"><b>S</b></p> <p><b>s (2)</b> 179:25 180:21</p> <p><b>sale (2)</b> 126:18 127:8</p> <p><b>salevalue101473 (2)</b> 120:23 126:8</p> <p><b>salevalue484 (1)</b> 116:15</p> <p><b>same (19)</b> 4:19 13:11,22 15:24 20:24 39:2 40:7 52:17 58:4 66:7 84:1 86:15 91:10 142:16 160:1 182:13,20 193:5,18</p> <p><b>sample (7)</b> 21:15,16 22:19 24:25,25 25:6 190:6</p> <p><b>santander (7)</b> 55:23 56:3,12,14,15,16,24</p> <p><b>satisfied (1)</b> 118:25</p> <p><b>save (2)</b> 71:3 90:1</p> <p><b>saved (1)</b> 71:21</p> <p><b>saw (4)</b> 30:18 52:12 119:20 123:9</p>	<p><b>saying (33)</b> 7:19,23 8:21 18:20 30:5 48:22 51:8 59:12 61:14 82:14 83:22 84:6 94:23 106:15 109:6 118:22 119:8,12 143:7 165:9 166:15,25 167:3 169:17 174:7 175:15 176:20 183:5,20 184:4 186:25 187:2 198:10 115:11 120:22</p> <p><b>scale (12)</b> 17:6 19:7,19 21:7,22,22 25:1 26:10,14 61:2,2 62:17</p> <p><b>scenario (14)</b> 51:21 54:6 57:17 58:21 59:11 65:7,24,25 72:19 73:3,8 74:17 91:7 150:1</p> <p><b>scenarios (3)</b> 74:22 79:5 150:19</p> <p><b>scheduled (2)</b> 194:17,17</p> <p><b>scheme (3)</b> 32:10 158:13,19</p> <p><b>scope (1)</b> 175:25</p> <p><b>screen (4)</b> 52:12 71:7 125:1 136:23</p> <p><b>script (2)</b> 149:5 160:17</p> <p><b>scripts (2)</b> 154:21 155:25</p> <p><b>search (23)</b> 18:22 19:11,23,24 20:1 21:6,17,24 22:1 30:22 81:10 96:21 98:4,20,25 99:5,11,12,22 100:12 115:1 135:14 162:4</p> <p><b>searched (2)</b> 85:3 163:11</p> <p><b>searches (4)</b> 19:17 99:19 100:7 161:15</p> <p><b>searching (3)</b> 20:4 25:5 99:2</p> <p><b>second (42)</b> 8:24 14:12 15:13 26:23 30:7 32:8,15 45:7 50:23,25 56:7 60:16 66:1,14 70:3,14 72:13 78:20 81:17,17 92:1 96:24 98:15 103:9 127:22 140:6 146:5 163:21 164:6,24 165:18 168:8 169:5 170:17 176:12 177:5,22,24 179:18 185:5 186:15 187:18</p> <p><b>secondary (1)</b> 122:9</p> <p><b>secondly (4)</b> 52:7 103:20 159:19 160:3</p> <p><b>seconds (1)</b> 131:6</p> <p><b>section (17)</b> 66:22 67:1 68:12,18,19 72:17 164:3,22 166:20,23,24,25 167:4,5,7,8 172:25</p> <p><b>sections (1)</b> 70:14</p> <p><b>secure (2)</b> 72:25 136:23</p> <p><b>security (1)</b> 179:25</p> <p><b>see (106)</b> 1:15 7:12,19 12:25 14:6 15:24 18:10,11,14,16,17 21:18 23:23 27:4,9 36:21 37:6 46:10</p>	<p>51:11 52:3 55:21 61:20 66:18 76:21,23 78:15,21 80:8 81:17 82:5,14 84:20 93:1,4,15 94:13 96:19 97:5 98:2 106:1 107:17 109:22 111:6,11,24 113:12,15 114:7,14,22 115:9 116:2,19,21 117:11,15,16 118:10,20 120:12,16,24 121:5 122:9 125:19,20 128:12,21,23 135:15 136:11 139:23 146:12 151:24 157:8 163:14,15,16 165:6,13 167:16,23 168:1,5 169:1,25 173:9,18,24 174:16 176:19 177:9 179:18 180:5,10,18 181:22 183:16 185:19 189:12,21,25 190:14 193:11 197:20,23</p> <p><b>seeing (2)</b> 99:20 126:11</p> <p><b>seek (1)</b> 10:24</p> <p><b>seeking (13)</b> 31:7,8,9 35:13,14 41:20,21 59:1 70:10 77:11 119:8 122:22 170:13</p> <p><b>seem (6)</b> 54:15 95:7 98:14 107:6 135:19 142:8</p> <p><b>seen (57)</b> 8:1,13 17:6,10 26:10 29:1 30:11,20,21 31:10 62:9,13 65:4 74:21 75:17 76:12 80:21,23 81:22 82:18,19 84:11 85:4,12 94:17,23 95:16 96:12 109:3,8 113:7,13,24 114:4 117:13,14 128:3 134:6,13,14 135:12 136:12 156:1,1 161:7 162:5,14,17,18 165:4 172:7 176:16 178:12 179:6 182:1,17 185:1</p> <p><b>sees (3)</b> 50:6 90:19 148:11</p> <p><b>segregation (2)</b> 168:16,24</p> <p><b>seized (2)</b> 89:14 108:17</p> <p><b>selected (1)</b> 190:6</p> <p><b>selling (2)</b> 115:12 155:23</p> <p><b>send (2)</b> 43:17 56:19 133:25</p> <p><b>sending (2)</b> 105:14 133:25</p> <p><b>sends (3)</b> 52:19 109:5,17</p> <p><b>senior (1)</b> 168:24</p> <p><b>seniority (1)</b> 75:2</p> <p><b>sense (7)</b> 26:9 62:17 69:22 71:15 80:19 134:4 141:11</p> <p><b>sensible (2)</b> 47:18 99:1</p> <p><b>sensibly (1)</b> 15:12</p> <p><b>sent (14)</b> 13:24 14:9 55:24 56:15,22 60:14 68:16 74:9 92:19 105:16 109:20,22</p>	<p>110:3 117:24</p> <p><b>sentence (2)</b> 119:21 165:2</p> <p><b>separate (2)</b> 78:2 123:14</p> <p><b>separation (1)</b> 69:7</p> <p><b>september (1)</b> 181:19</p> <p><b>sequence (1)</b> 80:14</p> <p><b>serial (1)</b> 83:4</p> <p><b>series (8)</b> 3:3 13:3 22:4,4 62:3 66:2 142:9 189:12</p> <p><b>serious (4)</b> 182:4,5 183:8 198:17</p> <p><b>seriously (1)</b> 75:19</p> <p><b>serve (1)</b> 36:23</p> <p><b>served (2)</b> 12:14 106:16</p> <p><b>server (10)</b> 32:24 33:8 92:7,13,20,21 93:6 94:12,20,24</p> <p><b>servers (1)</b> 190:8</p> <p><b>service (15)</b> 106:15 176:8 178:9 181:10 187:19 188:1,4,9,16 192:2 193:20 197:6,22 198:6 199:6</p> <p><b>services (2)</b> 187:23 188:14</p> <p><b>session (10)</b> 2:16,16 35:4,6 149:1,6,15,16 152:20 153:9</p> <p><b>sessions (1)</b> 153:8</p> <p><b>set (16)</b> 34:19,23 42:8 46:22 53:7 57:8 69:8 72:15 77:17 99:1 119:6 135:21,24 187:18 190:9,17</p> <p><b>sets (2)</b> 58:20,22</p> <p><b>setting (2)</b> 159:10 190:10</p> <p><b>settings (3)</b> 6:13 179:25 190:12</p> <p><b>settlement (10)</b> 103:13 106:12,17,25 107:7 112:4 113:8,18,21 115:13</p> <p><b>seven (1)</b> 189:17</p> <p><b>several (3)</b> 48:1 169:1 186:14</p> <p><b>shall (6)</b> 2:14 23:8 41:10 81:11 85:24 86:4</p> <p><b>shame (1)</b> 63:6</p> <p><b>share (1)</b> 199:17</p> <p><b>shield (1)</b> 187:9</p> <p><b>short (6)</b> 64:2 71:24 101:24 102:22 153:23 154:8</p> <p><b>shortcircuit (1)</b> 142:12</p> <p><b>shortfall (1)</b> 3:23</p> <p><b>shortfalls (1)</b> 29:25</p> <p><b>shot (1)</b> 52:12</p> <p><b>should (60)</b> 3:16 21:4 23:1 25:4 28:8 33:11,16 34:10 57:11 62:6 63:11 77:10 78:4 79:18 83:9 87:22 88:15 91:11,14 93:15 95:9 99:5 109:14 111:22 113:2 128:14 131:18 143:21 147:11 148:10 150:13,22,24 151:1,9,22,23,25</p>	<p>152:2 156:15 158:17 160:8 161:3 165:4 169:11 170:5 171:23,24 175:25 178:23 179:7 180:1,14 181:6 184:7,9 189:1 190:10 197:6,20</p> <p><b>shouldnt (5)</b> 4:1 22:23 41:22 54:13 158:16</p> <p><b>show (4)</b> 56:24 117:8 142:17 162:18</p> <p><b>showed (1)</b> 125:24</p> <p><b>showing (1)</b> 26:16</p> <p><b>shows (5)</b> 29:20 104:23 110:9 136:7 162:6</p> <p><b>side (5)</b> 47:20 104:5 125:14 189:13 193:11</p> <p><b>sight (2)</b> 100:18 127:19</p> <p><b>signalling (1)</b> 66:25</p> <p><b>significance (1)</b> 32:14</p> <p><b>significant (6)</b> 62:13 142:22 163:12 179:20 193:6 195:4</p> <p><b>signify (2)</b> 104:6,7</p> <p><b>similar (3)</b> 5:18 116:16 156:13</p> <p><b>simple (2)</b> 72:6 76:5</p> <p><b>since (8)</b> 3:10 9:1 95:3 98:14 99:16 160:11 165:25 193:8</p> <p><b>single (10)</b> 30:11,15 106:11,15,24 113:17 115:11 136:22 158:7 172:14</p> <p><b>sit (3)</b> 101:6,7 110:4</p> <p><b>site (4)</b> 78:7,8 157:6 195:16</p> <p><b>sitting (2)</b> 71:7 136:22</p> <p><b>situation (13)</b> 36:24 37:3 50:11 55:6 58:2 89:11 90:15 95:14 152:6 174:9 182:14,18 184:9</p> <p><b>situations (3)</b> 89:23,25 90:1</p> <p><b>six (2)</b> 98:19 128:23</p> <p><b>slightly (5)</b> 38:10 48:16 159:6 171:25 193:22</p> <p><b>slower (1)</b> 100:24</p> <p><b>slowing (1)</b> 180:13</p> <p><b>small (26)</b> 29:9,12 30:1,5,6 31:17,18,21,23 32:1,4,5,7 33:19 55:1,7 60:3,8 61:4,5,14 66:8,9 156:25 179:22 180:10</p> <p><b>smaller (1)</b> 62:19</p> <p><b>smiths (2)</b> 56:2,7</p> <p><b>software (6)</b> 79:11 187:14 195:21 196:4 197:14,19</p> <p><b>somebody (9)</b> 13:1,2 16:7 43:24 44:23 108:2 109:11,16,20</p> <p><b>somehow (1)</b> 68:15</p> <p><b>someone (8)</b> 28:7 46:21 55:5 73:9 133:21 134:7,20 136:22</p> <p><b>someones (2)</b> 77:12 136:24</p> <p><b>something (46)</b> 4:7 8:21 13:14 14:6 15:15</p>	<p>20:3 28:1 30:15,21 37:5,7 38:20 39:7 41:6 54:16 58:4 65:3,19 69:8 75:16,18 77:24 83:23,24 88:8 89:20 90:5 99:6 105:2 106:6,23 107:1 110:18,20 113:12 114:5,25 119:4 122:21 151:16 158:5,15 160:14 167:13 182:9,15</p> <p><b>sometimes (9)</b> 20:19,21,22 27:4 31:5 64:8 78:4 148:8,14</p> <p><b>somewhat (2)</b> 8:11 36:7</p> <p><b>somewhere (7)</b> 59:21 61:18 62:22 76:9 88:17 145:9 164:19</p> <p><b>soon (1)</b> 131:8</p> <p><b>sophisticated (1)</b> 76:10</p> <p><b>sophistication (1)</b> 118:10</p> <p><b>sort (40)</b> 4:25 6:15,19 7:14 12:18,22 15:20 18:2 25:2 26:22 50:23 63:15 64:18,24 65:4 68:25 72:7,24 73:13,18,21 83:3,7 87:3 90:2 96:5 99:5,13 105:9 109:9 114:3 137:11 145:5,22 157:1 161:8,20 172:21 176:18 190:22</p> <p><b>sorts (4)</b> 39:4 49:14,15,15</p> <p><b>sotto (1)</b> 86:9</p> <p><b>sought (1)</b> 120:17</p> <p><b>source (2)</b> 17:13,18</p> <p><b>sources (1)</b> 55:16</p> <p><b>spat (1)</b> 23:24</p> <p><b>speaking (1)</b> 73:6</p> <p><b>specific (6)</b> 7:7 98:18 165:21 167:5 188:5 198:21</p> <p><b>specifically (5)</b> 14:2 23:21 72:4 85:3 98:5</p> <p><b>specification (1)</b> 144:15</p> <p><b>spend (5)</b> 1:10 14:9 143:14 153:22 187:16</p> <p><b>spent (3)</b> 122:21 132:7 184:17</p> <p><b>sphere (1)</b> 192:20</p> <p><b>splitting (1)</b> 38:8</p> <p><b>spm (4)</b> 1:23,23 45:20 47:22</p> <p><b>spoken (1)</b> 131:8</p> <p><b>spot (1)</b> 72:21</p> <p><b>spotted (1)</b> 72:8</p> <p><b>sql (18)</b> 18:5 19:23 74:11,12 144:18 145:21 146:1,4,10 149:5 152:19 154:11,20 155:25 156:12 160:17 161:9,10</p> <p><b>ssc (34)</b> 28:7,16 79:19,21 88:24,25 89:3,6,14,21,24 90:12,16,16 91:1,9 105:11 107:25 108:14,17 109:1,7,18 117:16,21 118:5 119:6</p>	<p>136:16,18,22,23 137:6 150:23 151:8</p> <p><b>staff (4)</b> 140:12 141:25 147:21 148:5</p> <p><b>stage (3)</b> 23:18 157:20 183:15</p> <p><b>stages (6)</b> 17:21 30:19 51:2 53:9 146:13 182:1</p> <p><b>stakeholders (1)</b> 151:8</p> <p><b>stamps (2)</b> 39:3,4</p> <p><b>stand (3)</b> 86:8 139:22 198:14</p> <p><b>standard (5)</b> 33:25 79:10 92:6,14,17</p> <p><b>stands (2)</b> 48:15 51:8</p> <p><b>start (8)</b> 3:2 21:9 101:8 109:13 164:1 191:25 199:13,15</p> <p><b>started (4)</b> 13:19 35:4,6 135:21</p> <p><b>starting (4)</b> 2:20,22 3:15 22:8</p> <p><b>starts (4)</b> 3:18 36:18 168:1 169:17</p> <p><b>statement (31)</b> 14:11,15,20 27:6 34:13,24 35:3,21 40:25 43:10 45:7 56:2,7,10 70:20 71:23 72:1 77:16 78:13,20 87:5 91:24 96:20 98:1,13 132:6,9 158:2 176:12 180:4 192:4</p> <p><b>statements (12)</b> 19:23 35:23 63:11,19 72:1 102:10 144 156:12 157:6 161:9,11 189:15</p> <p><b>states (2)</b> 147:8 154:18</p> <p><b>staying (1)</b> 199:20</p> <p><b>steal (1)</b> 77:11</p> <p><b>step (2)</b> 9:3 75:4</p> <p><b>steps (4)</b> 17:19 96:4 152:8 184:7</p> <p><b>still (4)</b> 46:2 61:17 63:17 157:16</p> <p><b>stock (13)</b> 101:12 112:8 115:18 117:21 118:16 128:16 129:17 157:17 159:9,12,13,14,25</p> <p><b>stood (1)</b> 198:20</p> <p><b>stop (3)</b> 45:20 69:16 106:9</p> <p><b>stopping (4)</b> 77:22 106:4 113:6 158:12</p> <p><b>storage (2)</b> 39:1 194:1</p> <p><b>store (1)</b> 79:9</p> <p><b>stored (1)</b> 146:25</p> <p><b>straight (3)</b> 57:17 136:6 176:11</p> <p><b>strengthen (2)</b> 175:5 180:21</p> <p><b>strengthening (3)</b> 169:8,18 170:2</p> <p><b>strict (1)</b> 16:2</p> <p><b>strictly (1)</b> 13:9</p> <p><b>stripping (1)</b> 80:11</p> <p><b>strong (1)</b> 144:25</p> <p><b>stronger (1)</b> 184:6</p> <p><b>structural (1)</b> 83:18</p> <p><b>struggling (1)</b> 54:15</p> <p><b>stuck (1)</b> 147:24</p> <p><b>stunt (1)</b> 76:2</p>
--	--	--	--	--	---	---

subject (3) 21:19  
 172:21 198:5  
 submitting (1) 45:22  
 subpostmaster (11)  
 36:23 45:16 46:7 80:2  
 87:12,17 88:1,2 90:8  
 149:21 153:12  
 subpostmasters (2)  
 57:15 79:22  
 substantial (1) 76:11  
 successfully (1) 118:12  
 suggest (28) 10:14 15:5  
 18:13 20:8 21:11 28:5  
 31:7,10 44:2 55:5 70:1  
 71:9 73:4 75:12 84:14  
 89:23,25 98:20 99:24  
 119:16 136:13  
 151:3,12 168:11 169:3  
 184:24 185:24 187:5  
 suggested (11) 24:3  
 55:21 81:24 98:3  
 108:24 110:7 144:12  
 159:7 166:11 170:25  
 177:17  
 suggesting (45) 7:2  
 18:17 23:1 49:25  
 51:21 52:3  
 58:2,14,16,21  
 59:10,25 62:7 65:7  
 70:9 72:19 74:6 81:20  
 83:8,21 90:14,14,25  
 91:3 108:11 109:22  
 112:14 114:11 117:1  
 119:4 121:1 129:19,24  
 137:24 140:15  
 142:2,20,21,23 155:19  
 174:1,4 178:15,25  
 185:21  
 suggestion (9) 28:12  
 47:6 54:16 70:20  
 120:4 127:4 151:11,20  
 153:1  
 suggests (5) 78:22  
 140:11 141:24 151:8  
 159:8  
 suicide (1) 76:1  
 suitable (1) 22:12  
 sum (1) 161:12  
 summaries (4) 104:21  
 106:22 110:8,25  
 summary (6) 104:19  
 163:22 164:25 165:11  
 166:22 179:17  
 super (1) 145:9  
 superiors (1) 6:10  
 supplemental (3)  
 95:12,16 192:3  
 supplied (1) 184:11  
 support (9) 25:8 68:2  
 90:23 104:8 140:12  
 141:25 147:21 148:4  
 152:18  
 supporting (2) 187:23  
 188:14  
 supports (1) 166:25  
 sure (33) 5:2 6:14,21  
 7:8 11:16 24:11 44:1  
 45:6 48:22 53:9,19  
 62:20 65:15 67:21  
 75:23 80:20 99:18  
 108:1,7,23,24 109:19  
 117:22 118:9,15,17,23  
 130:10 135:14 171:1

177:13 189:4 191:3  
 surely (3) 27:17 67:10  
 149:24  
 surprise (2) 8:11 61:13  
 surprised (1) 196:15  
 surprises (1) 7:1  
 surprising (5) 82:9  
 88:16 118:3,7 119:11  
 suspect (2) 102:2 158:7  
 switching (1) 148:18  
 system (92) 2:1 3:8  
 5:23,25 6:13  
 16:7,7,10,23 20:17  
 30:15 33:6 34:4,5  
 39:2,3 43:21 46:8  
 48:8,12,20,21  
 49:20,21 51:3,4,8,9,14  
 53:21 54:24 56:14  
 57:4,25 58:5,9 61:3,16  
 64:23 68:6 69:4,4  
 71:12 72:9,23 73:22  
 76:6,9,10 80:13,17  
 82:17 96:21 105:8,22  
 109:12 111:15,19  
 121:18 123:2,15,19  
 126:21 130:1,4 131:23  
 145:7,11,25 146:14  
 151:15,21,22,23  
 154:17 157:18 163:8  
 171:17,18,23  
 181:11,12 183:3,4,12  
 188:13 189:9  
 194:20,24 195:21  
 196:20,25  
 systemgenerated (1)  
 181:6  
 systems (19) 5:17 6:16  
 36:2 38:25 47:25  
 48:4,5 49:17 74:1,2  
 78:11 127:16  
 146:17,20 173:11  
 182:19 184:10 189:10  
 191:3  
 T  
 t0 (1) 3:2  
 table (9) 38:9 39:7  
 120:15,18 150:9  
 166:20,24,25 185:11  
 tables (20)  
 37:12,18,19,22,24  
 38:3,4,5,9,16,17,23  
 49:7,9 76:6 139:5  
 145:23,24 146:25  
 191:25  
 taken (26) 9:3 17:19  
 21:25 27:22 33:14  
 49:9 57:10 59:22  
 79:18 81:23 86:14  
 96:4,10 118:13 124:1  
 130:12 138:5 148:22  
 152:8 165:14 170:20  
 173:21 174:12 184:7  
 198:22,24  
 takes (2) 8:11 83:9  
 taking (9) 33:2 38:9  
 66:17 81:18 83:14  
 84:25 136:4 179:15  
 184:6  
 talk (27) 1:9 2:7 4:2 5:9  
 27:2 32:22 35:15  
 37:17 39:12 40:8  
 41:10 46:18 47:25

55:10 62:16 69:15  
 72:10 80:23 84:14  
 91:18 103:4 134:24  
 136:3 137:17 141:19  
 170:11 193:5  
 talked (10) 32:16,19  
 36:16,16 46:19 86:22  
 132:23 163:18 170:8  
 186:4  
 talking (56) 2:7 5:10,17  
 6:6,20 7:22 12:18  
 29:10 30:13 32:21  
 33:19 35:14 38:16  
 39:13 40:9 41:11,23  
 50:11 53:18 54:6  
 62:17,18,19 64:21  
 65:25,25 66:22  
 67:6,22 68:8,20  
 73:13,17 74:24 81:4  
 84:17,24 88:7  
 89:10,20 95:18  
 99:3,14 100:4 103:1  
 119:22 121:10 134:16  
 147:23 166:12,13,13  
 184:13 191:11 193:18  
 195:11  
 talks (4) 137:18,19  
 150:10 151:17  
 tas (1) 47:19  
 task (2) 19:21 21:9  
 tasks (3) 7:6,7 8:2  
 tc (3) 65:21 68:16 89:8  
 tcs (12) 45:2,2,12,15  
 46:5,8,12,16 47:19  
 55:25,25 57:15  
 technical (3) 6:12 19:15  
 40:18  
 telling (5) 11:15 23:2  
 100:10 104:1 127:3  
 template (1) 141:21  
 templates (1) 141:20  
 ten (5) 33:23,24 63:2  
 100:16 184:17  
 tens (6) 17:10 29:5,6  
 100:15,15,16  
 tenyear (1) 33:24  
 term (6) 2:12  
 40:14,18,19 41:2  
 163:15  
 terminology (3) 20:21  
 41:8,9  
 terms (13) 2:6 12:16  
 19:15 21:25 22:1 41:3  
 47:17 98:3 99:1,11,12  
 115:1 162:4  
 terribly (2) 189:21  
 198:25  
 test (9) 10:24  
 118:1,9,11  
 119:15,17,18,23  
 188:17  
 tested (6) 157:1 180:24  
 190:12 195:22 196:5  
 197:15  
 testing (1) 179:21  
 tests (3) 189:13,25  
 190:1  
 text (6) 81:2,2,24  
 83:17,19 159:8  
 thank (32) 4:2 5:20  
 17:2 28:21 29:16  
 35:1,18 36:12 43:4  
 46:25 71:21 72:18

78:20 85:9,22 88:21  
 91:17,25 93:10 97:3  
 109:12 133:4,9 143:8  
 144:17 154:5 156:19  
 161:6 162:24 189:16  
 193:1 200:9  
 thats (144) 2:14 5:4  
 7:15,18 8:14 13:14  
 17:25 18:3,8,11,14  
 19:21 20:17 23:23  
 25:3 27:13 28:4,18  
 29:20 30:21,22 32:8  
 34:2,10,13 35:14  
 37:7,8,20 40:17 41:2  
 42:4 43:18 45:22,23  
 48:7 50:1,6 51:18  
 52:10 53:2,17,18,23  
 54:11 55:4 56:6  
 57:5,14 59:17 60:18  
 61:24 62:1,11 63:6  
 67:10 69:18,19 70:4  
 73:5,15 77:9,9,24  
 78:7,21 81:17 84:19  
 86:21 87:25 88:25  
 94:17 96:7,21 97:4,25  
 99:10 102:17 105:7  
 106:1,4 108:22,25  
 111:19 114:3,21  
 118:15 122:1 124:6  
 125:10,19,23 128:23  
 129:6,24 130:5  
 132:4,10 134:10  
 135:12,19 137:2,4  
 138:2 139:18,25 142:5  
 143:3 144:21 146:2  
 147:13 149:1,9,12  
 151:13 153:9 154:11  
 155:14 157:21 160:20  
 163:7 164:3,20 166:17  
 168:7 169:5,6  
 170:7,10 173:3,4  
 174:22 175:2  
 182:15,17,22 188:3  
 190:17 191:16 192:20  
 195:7 196:15 199:12  
 200:7  
 themselves (3) 75:17  
 119:1 174:14  
 theoretical (2) 1:25  
 17:5  
 theory (2) 2:1 113:23  
 thereabouts (1) 115:20  
 therefore (7) 10:24 32:9  
 68:1 71:3 104:9 148:3  
 165:24  
 thereof (1) 188:18  
 theres (24) 2:16 7:16  
 10:12 11:5 27:2,3,22  
 38:8 52:8 58:17 78:2  
 82:25 83:19 84:13  
 87:6 95:23 108:9  
 140:1 142:21 147:9  
 156:7 172:15 190:19  
 199:22  
 theyre (1) 16:9  
 thing (12) 2:9 13:22  
 20:1 22:12 26:21  
 48:23 86:15 146:1  
 154:24 167:18 183:14  
 186:17  
 thinking (11) 25:22  
 28:25 76:16 78:25  
 98:8 103:16 112:13

140:1 161:6,18 192:1  
 thinks (1) 50:5  
 third (16) 55:22 66:1  
 68:13 70:20 78:13  
 88:22 90:22 127:22  
 132:16,18 147:17  
 152:1,5,17 169:7  
 190:2  
 though (7) 47:8 52:21  
 63:2 84:16 99:12  
 117:18 124:11  
 thought (14) 8:19 54:1  
 58:1 125:2,22 129:21  
 155:15 165:8 171:9  
 185:6 191:1,4,21  
 192:8  
 thousand (1) 62:18  
 thousands (13) 17:10  
 26:4,4,6 61:10,11 62:8  
 152:14,16  
 161:13,13,14 181:13  
 threats (1) 196:21  
 three (8) 66:7 76:12  
 79:4 101:16 138:18  
 143:3,6 156:4  
 through (46) 19:6 22:6  
 56:19 60:13,22 61:15  
 63:12 67:13,15  
 68:12,15 72:6 73:15  
 74:1 80:11 90:12,15  
 91:8,14,19,20  
 92:16,24 102:11  
 104:25 114:13  
 129:15,16 133:10  
 134:24 136:3 149:15  
 151:4 152:1 161:15  
 163:11 173:14 181:14  
 185:11 189:14,18  
 191:18 195:5 197:3  
 198:23,24  
 throughout (2) 84:15  
 188:15  
 throw (1) 51:25  
 thrown (1) 104:11  
 thrust (2) 96:1 99:25  
 thursday (1) 1:1  
 ticked (1) 60:11  
 ticket (1) 181:15  
 tidy (1) 159:5  
 tier (1) 90:22  
 tighter (1) 15:12  
 till (2) 78:6,6  
 time (45) 3:2 6:25  
 12:12 13:23 14:8  
 16:12,14 24:6 33:18  
 39:3,4,5 45:7 66:7  
 71:3,21 74:8 82:6 90:1  
 92:11 95:4,7 98:2 99:4  
 100:19 124:3 125:20  
 129:3 136:5 138:11  
 141:12,16 143:5,14  
 149:23 150:15  
 153:22,24 154:1  
 168:18 174:23 177:11  
 188:11 192:15,16  
 timed (1) 158:5  
 timelimited (1) 87:1  
 timely (1) 195:6  
 times (9) 26:4,6 48:1  
 143:3,6 152:14 177:24  
 186:14 195:17  
 timing (2) 87:14 102:1  
 tiny (1) 32:3

tip (39) 48:13,20,23  
 49:20 51:24 52:11  
 53:17,20  
 54:1,18,19,25 57:4,23  
 58:24 59:5 61:3,12  
 62:3,8,11,14,16  
 64:9,22 65:8 66:13  
 74:13 106:5  
 121:9,11,17,25  
 122:10,24 143:22,22  
 144:8,8  
 149:22 65:8 66:13  
 74:13 106:5  
 121:9,11,17,25  
 122:10,24 143:22,22  
 144:8,8  
 tips (1) 62:21  
 title (1) 11:3  
 tittle (1) 178:18  
 today (12) 1:9 2:15  
 5:10 9:5,13 14:25  
 35:1,15 47:12 81:14  
 89:12 90:3  
 together (4) 11:5 59:14  
 66:4 131:19  
 token (1) 182:13  
 told (4) 14:6 44:17 88:1  
 156:15  
 tomorrow (7) 63:17  
 85:7 88:20 172:4  
 199:14 200:8,8  
 too (8) 15:15 35:16  
 39:11 58:17 84:4  
 131:8 136:4 145:13  
 took (10) 19:22 68:3  
 75:18 89:16 166:19,22  
 178:7 185:11,12 192:2  
 tool (80) 15:18,24,25  
 16:5,9,20 40:4,5,10,21  
 41:12,16,19,24 51:24  
 52:11,11,18  
 53:18,19,20  
 54:1,14,19,19,22,25  
 57:4,23 58:24 59:5  
 61:4 62:3,9,14 64:9,22  
 65:9 66:14 74:13  
 81:2,25 106:6  
 121:9,12,17  
 122:1,4,10,24 138:25  
 139:3,9,13 140:2,4,17  
 141:7,17,21  
 142:3,14,18,21,22  
 143:1,12,15,18,21,22,23,24  
 144:3,6,7,8,9,18 146:4  
 142:16  
 total (1) 97:21  
 touch (1) 86:25  
 tp (4) 157:16,17 158:1,8  
 tps (58) 30:15  
 48:10,21,23  
 49:11,13,20,21  
 50:1,12,12  
 51:3,3,8,8,14,18,23  
 52:4,22  
 53:1,10,12,14,21  
 54:2,24 55:16  
 57:4,18,25 58:5,9 61:3  
 64:23 67:23 68:5,15  
 69:20,21 104:25  
 105:21,22 107:4  
 111:15 120:18  
 121:12,18 122:1  
 123:1,15,19 125:14  
 127:16 129:5,10  
 130:1,4  
 tpsc (2) 108:3 109:2  
 tpsc257 (3) 104:19,20

110:8  
 tracked (2) 195:5,17  
 trading (8) 157:5 158:2  
 159:10,12,14,20  
 160:1,11  
 trail (1) 94:3  
 transaction (201)  
 1:18,20,21 2:5,7,14  
 4:4,7 27:8 28:9,10  
 34:16 35:11 36:18,19  
 37:1,4,11,19,25 38:17  
 39:5,6,15,18,19,22  
 40:3,4,10,18,19,19,21,23  
 41:4,5,12,16,19,24  
 42:12  
 43:6,7,8,12,13,21  
 44:5,5,8,8,12,13 46:15  
 48:7,12,18 50:9,19  
 52:9,16 56:3,17  
 59:14,19,20,20  
 60:1,13,19  
 64:14,15,21,25 65:3  
 72:5 73:25 77:19  
 79:3,9,20 80:7,15  
 82:11,15,21 83:4,6,13  
 84:5,7,16 86:6  
 87:10,19 90:20,24  
 91:2 92:8,9 94:6,13  
 96:3 98:22 99:2 100:2  
 103:1,3,14,14,18  
 106:21 107:7  
 112:4,15,18 113:8,9  
 115:6 116:22 119:10  
 120:13 121:22,24  
 122:15 123:5 125:23  
 126:9,10,21 128:3  
 129:15 130:24  
 133:6,12,16,19  
 134:2,9,12,17,19  
 136:11,14,15,17,25  
 137:2,9,18,19,20,22  
 138:1,3,5,7,9,22,24  
 139:3,5 140:2,17  
 141:2,17 142:3,14  
 143:2,11,12,21,24  
 144:3,6,18 145:16  
 146:21,23  
 147:4,7,14,19 148:3  
 149:11,18 153:2  
 155:3,4,7,10,13,14,18,20  
 160:15,24 162:19,22  
 transactional (1) 2:17  
 transactions (70) 1:14  
 2:8,19,24 3:3,10,14  
 4:15 5:5 38:5 39:25  
 40:3,8,9,12,14,16  
 41:1,11,15,18,22  
 45:13,18 46:6  
 52:17,18 61:6,15  
 66:10 79:8,15,18  
 80:17,22 82:24 83:12  
 85:1 87:11,14  
 88:2,2,4,6 90:10 94:11  
 97:22 99:13 106:13,18  
 110:15 113:18 118:14  
 126:15 133:1,2 137:11  
 139:3 140:3  
 142:4,15,19 147:24  
 148:13 152:11 155:23  
 160:10,16,18 161:25  
 transferred (3) 133:14  
 137:5,6  
 translating (1) 106:14

transmitted (8) 4:21  
 45:2,3 49:11 50:3  
 73:25 74:3 146:25  
 transmitting (1) 107:4  
 trashed (1) 32:23  
 treat (3) 43:7 47:11  
 49:1  
 treatment (1) 93:14  
 trial (10) 9:15 13:3 15:7  
 45:9 52:12 63:7 66:17  
 87:1 153:21 188:9  
 tried (3) 26:20 36:7  
 134:15  
 triggered (1) 108:4  
 triggers (1) 33:6  
 tripped (1) 85:4  
 trouble (1) 178:8  
 trt (1) 121:7  
 true (8) 2:19 20:5 44:19  
 56:25 77:9 94:1 116:4  
 182:20  
 truth (2) 52:4,5  
 try (4) 22:15 36:12 76:1  
 168:15  
 trying (11) 31:20 92:14  
 119:9 137:16 141:19  
 148:19 150:12 173:24  
 187:5,6,6  
 turn (1) 16:17  
 twenties (1) 29:5  
 twenty (1) 100:16  
 twice (2) 51:9 164:14  
 twothirds (1) 157:13  
 type (5) 59:19,20 65:3  
 118:23 121:7  
 types (1) 6:5  
 typical (2) 28:20 133:7  
 typically (5) 7:15 8:13  
 133:3 141:19 152:13  
 typing (1) 146:23

U

ultimately (2) 70:8  
 141:16  
 unable (3) 147:18 148:2  
 157:6  
 unbalanced (1) 113:9  
 uncomfortable (1)  
 31:20  
 unconfirmed (1) 153:10  
 underlying (1) 82:11  
 underneath (2) 125:8  
 157:4  
 understand (14) 2:9  
 3:22 5:15,18 10:1 53:6  
 112:1 126:24 130:9  
 131:10 134:1 143:6  
 144:2 155:12  
 understanding (8) 42:1  
 44:25 76:6 130:11  
 144:5 149:15 167:1  
 186:5  
 understating (1) 20:13  
 understood (5) 56:9  
 100:10 102:5,7 192:20  
 undertake (3) 7:9 77:3  
 162:21  
 undertaken (9) 8:2 60:1  
 62:11 126:16 149:19  
 155:7 160:10,19  
 162:20  
 undertook (1) 176:5

unexpected (3) 115:19  
 117:23 118:17  
 unfair (4) 48:16 171:25  
 172:3 193:22  
 unfamiliar (1) 142:8  
 unfortunate (1) 66:2  
 unilaterally (1) 14:22  
 unit (7) 104:8 112:8  
 115:18 117:22 118:16  
 128:16 129:17  
 units (6) 157:17  
 159:9,12,13,14,25  
 unless (2) 65:2 72:8  
 unlikely (6) 53:5 54:11  
 57:9 59:11 71:11  
 102:2  
 unnecessarily (1) 82:7  
 unreasonable (2)  
 183:21,24  
 unstick (1) 159:5  
 until (3) 90:11 127:5  
 200:11  
 unusal (5) 140:13  
 142:1,4,8,21  
 update (3) 159:9 173:3  
 181:17  
 updated (3) 13:4  
 120:21 126:7  
 updating (1) 159:17  
 upload (1) 83:9  
 upon (4) 3:10 5:24 10:8  
 184:6  
 urgency (1) 141:11  
 usage (1) 143:11  
 used (35)  
 15:18,22,24,25  
 16:1,9,21,21,21  
 17:4,15 18:7 26:25  
 43:17 54:19,20 70:22  
 79:10 94:19,24 99:17  
 102:15 108:9  
 129:19,21 141:6  
 142:14,18 143:1,15  
 145:15,21 149:5  
 152:19,19  
 usefull (2) 2:11 130:17  
 user (28) 4:8,13 6:14  
 52:13 70:16 73:9  
 74:7,10 75:1 124:19  
 145:9 154:23 156:1  
 163:15 168:21 173:11  
 174:9,24 175:4,7  
 176:7 185:7,15  
 197:18,19,25 198:21  
 199:4  
 users (12) 6:14 71:5  
 76:23 77:3 144:21,25  
 151:25 175:7,8,22  
 176:5 185:8  
 uses (2) 139:23 142:22  
 using (22) 19:10 40:4  
 44:22 51:24 53:17  
 57:23 58:23 61:3  
 74:13 81:2,24 89:7  
 94:6 121:11 122:24  
 123:7 125:5 137:1  
 138:24 140:4 141:22  
 162:3  
 usual (1) 173:15  
 usually (3) 18:13 54:23  
 169:13  
 utc (1) 158:1

V

validate (2) 177:18  
 180:23  
 value (18) 18:16,16,18  
 38:10 52:14 59:18  
 83:10 103:13 112:4  
 126:18 127:8 128:5  
 134:11,13 146:3,3  
 158:10 160:16  
 values (1) 30:23  
 valuesquantities (2)  
 111:4 127:25  
 vanishingly (2) 30:1,5  
 various (10) 38:16 48:3  
 49:16 108:3,9 109:2  
 146:25 150:18  
 151:5,17  
 vast (3) 16:13 54:17  
 93:7  
 venture (1) 136:13  
 versa (1) 172:19  
 version (3) 52:4,5 59:24  
 via (5) 48:7 92:7 121:25  
 122:10 176:7  
 vice (1) 172:18  
 views (1) 185:3  
 violations (1) 196:21  
 virtue (1) 88:13  
 visible (1) 117:10  
 visibly (1) 45:15  
 voce (1) 86:9  
 voyage (2) 101:2 136:2

W

waiting (1) 74:8  
 waits (1) 74:2  
 wanting (1) 96:14  
 wants (3) 159:9,13,19  
 warning (1) 135:18  
 wasnt (12) 8:24 12:14  
 14:12 88:16 105:2  
 113:20 160:23,25  
 172:23 174:10 186:21  
 187:1  
 wasting (1) 174:23  
 way (50) 7:4 8:5 10:12  
 16:1 20:24 21:21 23:5  
 27:22 29:24 34:7,10  
 43:5 44:7 45:17 47:10  
 52:19 54:20 56:18  
 58:1 64:8 68:12  
 71:12,17 72:15 76:8  
 78:3,3,4,5 84:1 88:13  
 90:12 92:6,14,15  
 119:12 133:7 140:18  
 145:24 157:14  
 160:3,19,25 166:11  
 169:24 172:17,23  
 183:12 197:3 199:8  
 ways (3) 27:4 43:11  
 141:7  
 weakness (2) 15:13  
 181:24  
 weaknesses (1) 164:16  
 wednesday (1) 115:19  
 week (2) 12:15 181:13  
 went (4) 3:14 75:10  
 90:12 183:10  
 werent (7) 12:8,11 16:2  
 46:12 69:14 96:9  
 170:20  
 whatever (12) 5:6 55:8  
 88:23 90:1 91:2 122:3

127:7,9 131:22 133:19  
 155:24 160:8  
 whats (21) 35:7 48:7,13  
 57:14 59:9 68:14  
 83:14 91:24 104:1  
 105:17 116:17 120:16  
 123:18 126:14 127:19  
 149:21 152:9 160:14  
 175:17 177:21 191:9  
 whenever (5) 7:24  
 36:17 83:17 88:10  
 153:22  
 whereas (1) 45:3  
 whereby (2) 133:20  
 154:16  
 wherever (1) 192:11  
 whilst (5) 45:15 46:1  
 122:19 155:2,17  
 whole (8) 25:8 42:8,8  
 54:22 99:23 134:4  
 145:25 151:15  
 wholesale (2) 132:21  
 133:3  
 whose (1) 33:9  
 widely (1) 7:8  
 widened (1) 143:25  
 wider (2) 192:20 193:21  
 willing (3) 55:4 59:2  
 101:6  
 wish (2) 86:7 91:18  
 wishes (1) 136:17  
 witness (24) 10:2 13:12  
 23:10 30:18 35:23  
 40:25 43:10 56:2,7,10  
 63:10,11,18,19 70:20  
 78:13,20 87:5 96:19  
 98:1,12 102:9,13  
 132:6  
 witnessed (1) 13:1  
 witnesses (2) 77:24  
 86:12  
 wonder (4) 71:3 101:5  
 155:5 199:12  
 wondering (4) 28:7 81:8  
 135:16 171:21  
 wont (10) 3:23 5:17  
 16:22 17:23 18:5  
 26:18 51:16 104:20  
 140:8 167:7  
 worded (1) 7:8  
 words (12) 9:10,17  
 14:4 22:18 30:7 32:8  
 45:12 99:7 145:3  
 187:19 192:2 198:11  
 wordens (4) 24:8,11,21  
 165:24  
 work (12) 28:1,3,18  
 33:11 78:4 87:20  
 122:16 150:22 151:22  
 168:2,7 169:18  
 workaround (1) 151:15  
 workarounds (2)  
 151:13,17  
 worked (1) 183:11  
 working (4) 72:20 75:25  
 84:23 148:9  
 works (4) 10:1 20:18  
 88:13 151:21  
 world (11) 10:12 54:25  
 59:2,12 61:1 66:6  
 76:16 77:9 85:16  
 178:20 180:7  
 worried (1) 64:23

worry (1) 181:25  
 worth (1) 110:14  
 wouldnt (40) 4:5 6:18  
 15:19 16:3 21:23  
 22:13 23:5 24:15  
 28:25 29:6 52:1,23  
 56:16 63:3 66:11  
 73:11,15 75:3,6 81:21  
 83:14,21 84:5 85:11  
 87:16 89:4 90:25 94:7  
 96:8,11 106:6 107:20  
 117:18 118:3,21  
 164:4,13 173:20  
 176:18 187:11  
 write (1) 28:2  
 writer (1) 107:11  
 writes (4) 139:9,11,13  
 154:19  
 written (8) 18:6 58:18  
 106:11,17,25 113:17  
 115:11 142:16  
 wrong (18) 23:14 51:15  
 58:4 68:11 74:23  
 75:16 78:23 85:17  
 89:14 106:23 114:11  
 116:7 117:3 118:6  
 120:5 158:21 161:2  
 197:7  
 wrongly (2) 15:15 50:14  
 wrote (2) 58:15 120:21

Y

year (7) 26:5,7 167:5,6  
 171:14 175:6 179:20  
 years (11) 19:8 25:3  
 29:11,18 174:2,4,16  
 175:2 188:10 190:21  
 197:3  
 yesterday (5) 27:23  
 36:16 101:6,8 110:7  
 yet (3) 14:18 67:25  
 92:20  
 yielded (1) 98:21  
 young (24) 163:2,17  
 165:8 166:11 167:3  
 171:1,4,5,11 172:8  
 177:8,23 183:7 184:7  
 185:7 186:13 187:22  
 188:4,6,24 190:25  
 191:12 193:14 196:16  
 youngs (1) 185:3  
 youre (2) 83:22 142:21  
 yourself (3) 179:5 184:6  
 189:19

Z

zero (8) 106:21 111:9  
 128:9 158:9,20,23  
 159:23 160:3

1

1 (13) 3:19 31:19  
 63:10,23 101:23 124:8  
 136:10 157:3 158:8  
 183:12 193:23 201:2,3  
 10 (15) 1:13 35:8 36:10  
 37:9,11,20 58:15,19  
 63:25 138:5 189:7,8  
 190:23 196:9 200:3  
 100 (3) 29:19 58:16,19  
 1000 (22) 30:19  
 103:3,15 106:11,17

112:9,14 113:1,4,17  
 115:12 124:4,10  
 125:16 126:10,25  
 127:12,13 128:16  
 129:16,20 150:8  
 101 (1) 189:13  
 1014 (2) 127:8 129:20  
 101473 (2) 126:19,25  
 1015 (8) 71:24 72:2  
 101:9 199:14,15,23  
 200:8,11  
 102 (5) 34:14 91:20  
 102:21 132:16 138:19  
 1030 (1) 1:2  
 1035 (1) 105:13  
 1041 (1) 106:1  
 107 (1) 189:14  
 10minute (1) 63:9  
 10th (5) 104:4 128:20  
 130:20 131:1,11  
 11 (11) 5:21,21 129:7,8  
 136:10 140:20 157:16  
 158:1 159:10,15  
 196:10  
 11122007 (1) 110:9  
 1150 (1) 61:20  
 1155 (1) 64:1  
 11th (1) 128:22  
 12 (11) 17:2 25:18  
 110:6 136:10 157:17  
 158:1,8 159:13 166:24  
 190:6 196:19  
 1205 (1) 64:3  
 12122007 (2) 120:21  
 124:20  
 123 (1) 139:12  
 1233 (1) 110:11  
 12th (14) 110:6,11  
 124:18 125:6,15  
 128:18,25 129:2,11  
 131:16,21,22 140:23  
 158:1  
 13 (3) 25:12 29:16  
 193:2  
 1300 (1) 159:2  
 1333 (1) 157:14  
 13th (1) 157:14  
 14 (5) 97:21 98:21  
 124:12 129:13 132:1  
 14th (3) 125:16 128:18  
 159:2  
 15 (4) 19:8 25:3 29:18  
 166:24  
 150 (1) 101:6  
 1506 (2) 125:6 131:16  
 1507 (4) 125:15 128:25  
 129:2,3  
 15th (1) 156:20  
 16 (1) 19:8  
 1613 (3) 110:24 124:12  
 132:1  
 1639 (2) 124:18 131:17  
 17 (2) 47:2 157:16  
 1719 (1) 110:13  
 1725 (3) 130:21  
 131:1,10  
 17493 (1) 105:14  
 17510 (1) 107:16  
 18 (1) 165:23  
 183227 (1) 120:22  
 18th (1) 181:18  
 1st (3) 11:20 12:13,14

2

2 (17) 63:16 78:17,19  
 102:20 124:8,15 125:3  
 128:23 130:16 136:10  
 157:22 166:20,24,25  
 167:4,7 194:4  
 20 (3) 3:19 29:11,13  
 200 (1) 102:23  
 2000 (1) 150:6  
 2005 (2) 43:17,22  
 2007 (5) 104:5 124:18  
 125:6 130:20 131:1  
 2010 (2) 140:20 156:20  
 2011 (21) 163:2 165:21  
 171:1,8,11,12,22  
 172:2,22 173:2,3  
 174:6 177:8,15,23  
 179:1 184:25 185:9  
 186:13,24 196:15  
 201112 (2) 175:1,20  
 2012 (17) 170:24  
 171:5,14,16,24  
 173:1,5 177:10,14  
 179:8,10,13  
 188:10,12,16,16 197:3  
 2013 (13) 174:17  
 177:14 179:12,14  
 181:19,20 185:2,25  
 186:2,16,25 188:10  
 190:21  
 2014 (2) 188:10 190:21  
 2015 (3) 188:10 190:21  
 197:9  
 2016 (4) 188:1,10  
 190:21 197:5  
 2017 (3) 188:10 190:21  
 197:3  
 2019 (2) 1:1 200:12  
 2080 (6) 112:22 113:1  
 125:24 126:19 127:9  
 129:19  
 20year (2) 32:13 161:23  
 21 (1) 12:7  
 220000 (1) 17:7  
 24 (1) 118:14  
 242 (1) 45:9  
 245 (2) 76:19 77:2  
 24th (1) 12:11  
 250 (1) 145:22  
 257 (1) 108:4  
 268a (1) 108:4  
 26th (1) 115:12  
 27 (2) 92:24 93:4  
 28 (1) 92:24  
 29 (9) 96:19,25  
 97:1,6,15 98:10,21  
 99:1,25  
 291 (1) 98:7  
 292 (1) 97:17  
 295 (1) 97:24  
 296 (1) 98:7

3

3 (8) 29:10 30:1 32:12  
 113:15 157:24 174:24  
 190:11 194:10  
 30 (5) 3:21 29:13,13  
 97:20 99:25  
 313 (1) 154:7  
 32 (5) 92:10  
 94:16,18,19,22  
 320 (3) 154:2,6,9  
 3220 (2) 66:19 68:12  
 3223 (2) 140:7 141:23

3232 (1) 103:10  
3234 (1) 103:10  
3243 (2) 67:15,16  
3247 (1) 67:13  
3248 (4) 67:14,15,25  
68:13  
3266 (1) 146:6  
3275 (1) 154:13  
3276 (1) 146:6  
3371 (4) 134:25  
135:1,6,8  
3400 (1) 150:2  
345 (2) 200:5,7  
36 (1) 169:25  
38 (3) 78:23 79:1 86:15  
381 (2) 79:6 86:15  
382 (2) 79:14 86:15  
383 (1) 87:8  
39 (1) 96:24

---

4

4 (12) 34:14 70:14  
91:20,25 132:14  
167:5,8 175:11 176:21  
179:15 180:17 194:15  
40 (1) 132:7  
40odd (1) 131:6  
425430435 (1) 101:7  
430 (2) 102:11 200:10  
4322 (1) 124:24  
45 (1) 122:21  
484 (7) 106:12 113:1,17  
115:20 126:10,25  
129:21  
4th (1) 14:12

---

5

5 (4) 31:19 70:14  
194:23 200:3  
5129 (1) 120:22  
5196 (1) 164:7  
5197 (2) 166:18,21  
5264 (1) 165:20  
5421 (1) 45:6  
5422 (1) 45:10  
5427 (1) 76:20

---

6

6 (4) 1:1 91:20 190:9  
195:3

---

7

7 (3) 105:13 191:14  
195:14  
72 (2) 66:15,16  
78 (1) 67:18  
7th (2) 104:18 200:12

---

8

8 (3) 72:1 180:17  
195:20  
88 (1) 193:9

---

9

9 (2) 196:3 197:13  
90000 (1) 60:17  
951 (1) 158:1  
959t (2) 150:4,17