## Wednesday 12 October 2022

## (10.00 am)

## Opening statement by MR BEER (continued)

MR BEER: I'm afraid we can't hear you at the moment.
SIR WYN WILLIAMS: I think you can now, I've just unmuted myself.
MR BEER: Thank you very much, sir, good morning to you. I know that your assessors both join online as well.
SIR WYN WILLIAMS: That's right, Mr Beer, and I'm also pleased to say that I have a live transcription feed so that I am well equipped.

MR BEER: Thank you, sir. I concluded yesterday afternoon by outlining a menu of four issues relating to training that I was about to cover. Can I turn to the first of them, the training need analysis and baseline competencies.

You will in due course be referred to a Training Needs Analysis for the Horizon rollout, Fujitsu, FUJ00001276. It was prepared in March 1997 by Stuart Kearns of Peritas. Now, the Inquiry did approach Mr Kearns for his involvement with the Horizon project and he was keen to assist. However, I'm saddened to say that Mr Kearns has recently passed away, so the Inquiry will not hear evidence from him.

The Training Needs Analysis was an important 1
findings of that group and, importantly, what effect, if any, those findings had on the overall programme. That can be taken down.

The second issue, the adequacy of the training programme. The issue is whether the training programme was adequate in terms of the time allocated to it and the content of it. I hope it's uncontroversial to say that the effectiveness of training ought to be evaluated by the extent to which the trainees are able to perform the object of the training programme after its delivery.

Although that statement is, I hope, uncontroversial, it doesn't grapple with a couple of other issues. Firstly, it doesn't include a definition of the minimum standard to which the trainees should be trained. In other words, the definition of competence. It is secondly quiet as to the scope of the training itself, what will and will not be covered. So, in due course, you will need to consider and make findings on the minimum levels of competence that were necessary to use the Horizon System in order to assess the adequacy of the training provided.

The evidence going to that issue will be heard across both Phases 2 and 3 and, in respect of the adequacy of the training programme, I would at this stage only draw to your attention two concerns that were
document that appeared to inform the design of the training programme thereafter. In particular, we will investigate how this analysis was carried out and how it was built on to develop the training programme. In particular, you will wish to investigate the views of the Post Office on the findings of the Training Needs Analysis. The Post Office carried out its own assessment of baseline competences after Peritas had completed the Training Needs Analysis.

Can we bring up, please, POLO0039748. This is a memorandum dated January 1999 from Kathryn Cook to various people in the Post Office.

If we can zoom in on the bottom three paragraphs, please -- apparently not.

Thank you. In it, she refers to a developing debate within the business about concerns over the entry level of competence of those attending Horizon training events, ie that it may be low enough to prejudice their ability to make the most of ICL's training. In the memorandum, Ms Cook goes on to refer to the Post Office's work on improving conformance, to which I referred yesterday.

You will, in due course, hear evidence that Post
Office went on to establish a Horizon Training
Competencies Development Group. We will investigate the 2
raised during the rollout of training: the first concerns the amount of content that was covered in the classroom sessions; and the second concerns training on balancing.

So as to the time available for training, can we bring up, please, POL00036992. You can see from the cover this is "Training Workbook 1". This document contains a series of ten training workbooks provided as a part of the training programme.

They were not intended, the ten workbooks, to be exhaustive, and if we turn ahead to page 6, no need to do so right now, in the penultimate paragraph the document says that it was not intended to cover every transaction and, in that respect, the user was referred to a separate Horizon user guide. You will likely, sir, be referred to the Horizon System User Guide at various points in the evidence in the Inquiry.

At this stage, I would simply refer on the transcript to POL00090227. That was a version of the User Guide in circulation in July 2000. It provided instructions on how to use the Horizon System.

That document, the User Guide, runs to 819 pages. The reason why I mention these documents together, the ten training workbooks and the 819-page User Guide, is to give an indication as to the scope of work that
subpostmasters, counter managers and assistants could be expected to carry out once up and running on the Horizon System.

## On the agreed training --

SIR WYN WILLIAMS: Can I just stop you for a second. The
document that you put up hasn't been taken down from my
screen. So l'd like to see you as well.
MR BEER: Thank you, sir.
SIR WYN WILLIAMS: That's fine now, Mr Beer.
MR BEER: Ah, good.
On the agreed training scheme, this material would
be covered by a user awareness event in the weeks
leading up to a migration, and a user training course in the days before it. The user training course would be a day and a half for subpostmasters, a day for counter assistants. You will hear that this was supplemented by written materials, supplemented by the Horizon helpdesk and supplemented by the Post Office's own support staff.

However, the training workbooks and the User Guide give a fair indication of the amount of work the training programme needed to address prior to migration. You will want, in due course, to consider whether there was sufficient time to cover all of this material in the time that l've mentioned.

The second point I referred to was the adequacy of
managers to carry out accounting tasks such as balancing, notwithstanding changes already made.

Can we look at page 7 of this document, please.
Thank you. This is a letter from the Post Office's
Bruce McNiven, director of the Horizon programme, to
ICL Pathway's John Dicks. It is dated 10 August 1999.
Mr McNiven sets out that the Post Office remained of the view that the training solution was inadequate, and this is in August 1999.

Notably, and one can see this from the second paragraph, the Post Office was concerned that it had to rely on its own HFSO resource to supplement training. "HFSO" stands for Horizon Field Support Officers, who were deployed by the Post Office to branches to assist with the migration to Legacy Horizon.

Acceptance Incident 218, to which I've just referred you, was subsequently passed through workshops and eventually resolved. This is an issue that you will wish to investigate with care. First, we will ask you to consider whether the Post Office's concerns about the adequacy of training on balancing were legitimate. If they were legitimate, secondly, we will ask you to consider whether they were adequately resolved. You will wish to investigate whether the final training provided to subpostmasters on the balancing issue was

5
training in relation to balancing. This issue, balancing, became a particularly contentious one because the Post Office raised an Acceptance Incident in 1999 regarding the quality of training.

Can we look, please, at POL00028357.
If we can see in the centre under "Description of Incident":
"Receipts and payments do not equal on the cash account. The receipts total is different from the payments total when printing off the cash account. This was originally thought to be a migration problem only however the fault has now been replicated on a cash account following the migration week."

Then if we can turn to page 4 of this document, and again look at incident 218:
"The Managers Training Course is not acceptable due to deficiencies in the accounting modules. In the live environment the training given did not equip the users to perform the completion of office cash accounts. This is a ['basic', I think that's meant to read] [Post Office Counters] function that is central to running and accounting for the [Post Office Counters] network."

So, in essence, the position was that the programme had failed properly to train subpostmasters and counter
adequate.
Of course, you have already heard evidence from a number of subpostmasters on the quality of the training that they received as part your human impact hearings. Whilst that evidence will not be repeated in the Phase 3 hearings, it will, of course, be weighed in your mind when making findings on the issues of training.

This then leads to the third set of issues that arise from training, namely the collection and use of feedback. You will hear evidence in due course on how feedback was collected on the training programme. The documents suggest that training courses were tested in dry runs. Once the programme was rolled out, ICL Pathway had contractual obligations to obtain feedback from the trainees.

The feedback collected for the training course was important for at least two reasons: firstly, the feedback could and should feed into the parties' assessment of the effectiveness of the training programme. The identification of any perceived deficiencies in the training programme was important. It would enable the parties to investigate whether there was a deficiency. If there was, they could then implement changes to the training programme to rectify 8
the deficiency.
The second reason why feedback was important was
because the results were themselves used as a measurable key performance indicator, KPI to benchmark ICL Pathway's delivery of the training program.

Can we turn up, please, POL00028212 and can we turn, please, to page 85 .

By way of reminder, sir, this is schedule A15 of the agreement between Post Office and ICL Pathway, which set out the former's contractual requirements.
Paragraph 1.165.7 of the agreement sets out that the training program had to receive a:
"... positive rating of not less than $95 \%$ as
a result of a training measurement questionnaire."
Therefore it was, of course, in ICL Pathway's
interests for the results of the feedback to be positive.

You will need to explore whether feedback was adequately collected to identify any concerns about the training program. Accordingly, you will wish to hear evidence on the different methods that Peritas and ICL Pathway adopted to obtain feedback and to what extent these led to changes in the training programme.

That can be taken down. Thank you.
The fourth set of issues in respect of training

Following the national rollout, the Post Office took over responsibility for training the network. The Post Office has provided a significant number of documents to evidence the designs for training courses and work materials provided. You will be referred to the pertinent documentation during the Phase 3 hearings so that you can examine the content of the training. The documentation suggests that training courses were designed to train new joiners to Post Office, part of which included training on Horizon. The design of these courses changed over the years and, in summary, the Post
Office itself summarised the training it says it
provided to subpostmasters as follows in a letter to the Inquiry. That's dated 14 April 2022.

They said, first, from 2001 to 2002, there was classroom-based learning, followed by 10 or 11 days of onsite training, followed by a further day of balancing support at the end of a trading period.

From 2003 to 2006, there were between five and ten days of classroom-based training, with between "five and ten days of onsite support ... depending on whether the classroom training was attended".

Thirdly, the Post Office said that, from 2005 to the rollout of Horizon Online, there were either five, eight or ten days of training on various modules, followed by

9
that I wish to touch on now is that of testing competence. This is again important for at least two reasons: firstly, it is obviously important to test the competence of trainees in order to determine whether they are able to use the system. In this respect, we would submit that the competence test should be a fair assessment of whether the trainee can use the system to carry out the functions of Horizon using the written information that would then be available to them.

Again, competence was again a key performance indicator to measure ICL Pathway's performance. I'm not going to turn it up again, but at paragraph 165.14 of the schedule that l've just shown you, it states that ICL Pathway were to ensure that 95 per cent of trainees completed training to an agreed level of competence. As such, it was in ICL Pathway's interests for subpostmasters to pass the competence test.

You will wish, therefore, to hear evidence on how competence was tested and the success rate of trainees. I would say at this point that a high pass rate of the competence test can show at least one of two things. First, it could show that the training course was functioning properly or, secondly, it could show that the competence test was too easy.

Turning, then, to Post Office training. 10
six days of onsite training and support with a further one-day follow up of balance support.

From 2007, the Post Office says that it introduced follow-up telephone calls at intervals of one month and six months after a branch was taken over by a new subpostmaster, with a day-long site visit after three months after the branch was taken over.

Then, lastly, a new suite of training was provided for Horizon Online in 2010, following a modular approach.

You've already heard evidence from some subpostmasters, including Nichola Arch, Pauline Coates, Pamela Lock, Tahir Mahmood and Chris Trousdale, who were very critical of the training that they received or the lack of it. I have previously raised that one of the issues you must determine is what training the subpostmasters, in fact, received. It seems you can expect a conflict of evidence on the training that provided by the Post Office over the year, which conflict may require resolution.

In readiness for the Phase 3 hearings, the Inquiry has sent requests for witness statements under Rule 9 to a number of people it has identified as being involved in the Post Office's training programme. These range from the trainers themselves to middle managers, as well

12
as to the senior management team.
We intend to call several witnesses from the Post Office to speak to the issues that I have mentioned, to enable you to make findings on what training was, in fact, delivered to subpostmasters.
This, of course, is not the only issue to resolve during this period. The same themes I identified in respect of rollout training continue, including: how were the baseline competences and training needs analysed? Were subpostmasters given sufficient time for training? Was the content adequate? How did the Post Office collect feedback and what did it do with it? How did the Post Office assess competence?
I would add one original point to this list which arises from the different nature of the training project for which the Post Office was responsible. The purpose of the rollout training was to see that those in the network were competent in using the Horizon System in readiness for rollout. The Post Office did not have a single block of training to roll out like ICL Pathway but had to maintain the network by training the new joiners. You will also wish to examine the extent to which refresher training was available to subpostmasters, who experienced difficulties operating the Horizon IT System.
described as a type of business support. This was provided by the Post Office itself. This would clearly go beyond Horizon but would also necessarily need to cover the IT system as well. The other might be described as technical support for Horizon, which was provided by Fujitsu. These support services are a central player to this Inquiry; relevant to several of the broad themes you must consider. They clearly play central roles in the identification and rectification of bugs, errors and defects, to the oversight of Horizon and Fujitsu's technical competence. Their work also fed into the resolution of disputes, to audits and investigations, to civil and criminal proceedings and to the approach taken more generally to the scandal and to redress.

The Inquiry has received extensive documentation relevant to the advice and assistance issue. This includes written information said to have been distributed or made available to subpostmasters to assist with operating Horizon.

You will be referred to this documentation during the hearings and will wish to consider whether it provided adequate support. You will also want to investigate in evidence how such documentation was made available to subpostmasters. This documentation also

There is, therefore, a significant volume of important issues to cover in respect of training, despite it only taking up six paragraphs in our list of issues. Of course, the issues on training can't be considered in isolation. They must be considered alongside the advice and assistance that was available to subpostmasters, an issue to which I will now turn.

The issues that you're asked to determine in relation of advice and assistance are found in section E under the "Horizon IT System" heading the list of issues.

The form of questions asked are very similar to those in relation to training: what advice and assistance was available to SPMs, managers and assistants in relation to Horizon? Who provided the advice and assistance and were they adequately experienced and qualified to do so? Was the advice and assistance available adequate? Did the advice and assistance available change or improve over the years and, if so, how?

Again, you will be asked to consider the current arrangements for advice and assistance but that will be considered as part of Phase 7.

The advice and assistance which you will consider can be divided in two linked groups. One might be
covers extensive policies and procedures on how the services provided advice and assistance were supposed to operate. These documents change, sometimes frequently and sometimes materially. So, in this opening, I will summarise some of the key players within the support service and refer you to some important documents within the timeline.

This comes with two caveats. Firstly, you will, in due course, be referred to many more documents, some of which will be amended versions of the documents I'm going to refer to today. It wouldn't be proportionate or probably useful to go through all of those amended documents in this opening. Secondly, you will hear about the support services in more detail during the hearings. You have already heard evidence from subpostmasters on their experiences of the support services. In due course, you will need to consider the extent to which the support structure that's set out in the documentation was, in fact, delivered to subpostmasters.

So I will firstly briefly set out the support services provided by the Post Office before turning to Fujitsu and I'm going to spend significantly longer explaining the support services provided by Fujitsu, albeit this isn't an indication of relative importance.

| The Fujitsu technical support services clearly go |  |
| :--- | :--- |
| centrally to the identification and rectification of | 1 |
| bugs, errors and defects. Moreover, the technical | 2 |
| nature of this topic means that more initial explanation | 3 |
| of it would be helpful. You will, in due course, hear | 4 |
| a significant amount of evidence on the advice and | 5 |
| assistance provided by the Post Office, and you will | 6 |
| need to consider carefully whether that was adequate. | 7 |
| So starting with the Post Office. | 8 |
| The Post Office has provided us with an extensive | 9 |
| amount of documentation, which it says was provided to | 10 |
| subpostmasters to support them using Horizon. These | 11 |
| range from updates to quick reference guides on various | 12 |
| transactions and processes. You will wish to consider | 13 |
| if these provided adequate advice and assistance, either | 14 |
| on their own or in conjunction with other support | 15 |
| services. | 16 |
| The Post Office operated a support network. You | 17 |
| will hear evidence of the work of field team advisers | 18 |
| and field team leaders. The Inquiry has sent Rule 9 | 19 |
| requests to many involved throughout the tiers of | 20 |
| network support and we intend to call some of them to | 21 |
| give evidence. You will wish to investigate how the | 22 |
| people on the frontline of support were trained and kept | 23 |
| up-to-date on Horizon. | 24 |

This is a process definition for incident management in 2000. It describes the process that ought to have been followed if a subpostmaster experienced a technical issue with Horizon and called for support. Can we turn to page 5 of the document, please.

I'm just going to use this index to the document to set out the incident management process. So first line support was the subpostmasters initial point of contact, and Fujitsu's gateway to the remainder of the support service. This was carried out by the Horizon System helpdesk later called the Horizon Service Desk. It would seek to resolve basic queries and pass on those that it couldn't rectify to the second line support.

The second line support for software was provided by the System Management Centre, or SMC. This sought to resolve technical problems itself and acted as a gatekeeper and filter to third line support. The SMC was also involved in identifying system events that could indicate that a software problem had arisen. There was also another layer of second line support for hardware, which I don't cover in this opening.

Third line support was provided by four teams. The System Service Centre, or SSC, was central to the investigation and rectification of software problems in Horizon. The Management Support Team or Management

Moreover, you will hear about the Post Office's own telephone support service, initially called the Network Business Support Centre, or NBSC, now referred to as the BSC. You will wish to investigate the same issues in respect of the NBSC, which service has previously been criticised in the evidence by subpostmasters. You will wish to hear evidence on how the NBSC and the Fujitsu support services operated together.

The Post Office and Fujitsu had agreed procedures in place to define the relationship between the helpdesk and the NBSC. You will wish to investigate how these two telephone services operate and whether they delivered a coherent and adequate service to subpostmasters.

Can I now turn to examine Fujitsu support services.
During the Inquiry, you will be faced with a large amount of documentation setting out the intended processes and procedures for support services. I reiterate that I only intend to show a very small sample of these documents in the opening to give an overview of the support services available and to raise some issues that you will wish to consider throughout.

For example, sir, can I ask to be brought up FUJ00079865. Thank you.

18

Support Unit, MSU, monitored and managed reconciliation errors. The Reference Data Team focused on errors in the reference data on which Horizon relied. The Operational Services Division provided third level support to network and central system incidents. You will hear evidence on all of these teams during the Inquiry. I'm only going to cover the SSC and the MSU in the opening.

Fourth line support involved development teams that would make changes to the Horizon coding to resolve identified bugs, errors and defects.

I will turn to cover these levels of support now but it's important to note that these process designs shifted over time. For example, a new process definition was designed for the release of Horizon Online. The cross-reference to that is FUJ00080027.

Equally, incident management was not the only line of support. Fujitsu had a separate process of problem management, as it was called, and we can see that FUJ00079853. You will hear of these issues in full in the course of the Phase 3 hearings.

So first line support, the Horizon Helpdesk or, as it became known, the Horizon Service Desk. Fujitsu's first line of support was the system helpdesk or the service desk. Its functions were initially set out in 20
FUJ00080489, which I would ask to be displayed: FUJ00080489.
If we can go to page 6 of the document, please. The document describes the helpdesk as:
"... the single contact point for all technical problems arising with the ICL Pathway operating domain."
It was the initial mouthpiece of Fujitsu's support services and the gatekeeper to the higher lines of technical assistance. This is summarised at page 7, please -- just over the page -- under paragraph 3. If we can look at the second paragraph of paragraph 3 , thank you, three lines in:
"The Horizon System Helpdesk staff will record details of the issue or request by ascertaining information from the customer regarding the nature and impact of the problem, the helpdesk operator will be able to resolve or diagnosis the problem during this initial telephone conversation. Should the operator fail to resolve the problem at this time, he will route the incident onto a second line support unit and inform the customers of the next expected action."
You will be referred to documentation that shows that a developing role of this element of first line support, in particular when the Horizon System Helpdesk became the Service Desk in 2005. Can we turn to 21
capacity, and you have heard subpostmasters' evidence of
poor service provided by the helpdesk. These are issues
that you will wish to investigate carefully in due
course. In particular, you will wish to examine the support available in respect of balancing and how to deal with discrepancies.

At this stage, can I ask to be brought up
POL00029174. This is an audit dated 28 April 2000, you
can see that in the top right. It's authored by Jan
Holmes, you'll see that at the foot of the screen there.
Can we turn forwards, please, to page 5 of the document,
and look at paragraph 3.3.1 -- sorry, 3.1.1. Sorry, can we go over the page, please?

Thank you, Ms Holmes describes, under the heading "The Wednesday Peak":
"The fundamental problem facing the [helpdesk] is the weekly 'spike' of work on Wednesdays associated with Cash Accounts and Balancing. The fact that the work load on this day is anomalous with the remainder of the working week is providing a real challenge to OSD in balancing the need to meet [service level agreements] while operating within a sensible staffing model that takes account of the total call pattern over a week. OSD are looking at ways of alleviating the problem, especially as the key [service level agreements] under

## FUJ00080455.

There appears to be a problem with that. I'll summarise the document. It was a report setting out the requirements for the new Horizon Service Desk and, on page 6 of the document at paragraph 1.10, we would have seen that the change was introduced because the Horizon System Helpdesk was not considered to be fully compliant with the IT Infrastructure Library, or ITIL -- that's IT Infrastructure Library, or ITIL.

ITIL provides a standard for IT service and asset management and you will, in due course, wish to investigate the red alert referred to, after what you would have seen as the first set of bullet points, and the external review of the Horizon System Helpdesk, including how any shortcomings affected the advice and assistance available to subpostmasters.

The service helpdesk was kept under review and changes made to the service with the migration to Horizon Online. That was described at FUJ00080457. You will wish to investigate how the first line support developed, and importantly, whether that affected the availability or adequacy of the advice and assistance received by subpostmasters.

You have already heard about the concerns raised about the helpdesk during the rollout, as to its 22
pressure are the prime targets of this weekly workload."
The audit went on to recommend that the NBSC -that's the Business Support Centre -- be positioned to as a gatekeeper to the helpdesk in an aid to reduce call volume and to implement interactive voice recognition. It was noted that:
"It would not be practicable to resource the [helpdesk] to meet the Wednesday spike since for the remainder of the week it would be impossible to retain the motivation and commitment of staff sitting."

We will investigate how these issues and recommendations were monitored.

Before moving on, can I draw your attention to one example of the "Wednesday Peak", as it's described, which is in Colin Baker's letter to the national executive council of the NFSP, that's NFSP00000020. So a letter dated, I think, 4 May, actually, rather than the 3rd, which I said. Mr Baker states that a balancing problem had arisen because of an error made by subpostmasters in completing stock reconciliation the week before. Mr Baker states in the first paragraph that this was a result of "poor advice":
"You may no doubt be aware that there were significant difficulties with Horizon balancing at some post offices yesterday. We are waiting for a definitive 24
answer from [Post Office Counters Limited] on the problems encountered. However what we know so far is that a problem arose last Thursday morning in the uprating of stamps and, resulting from poor advice, some subpostmasters did not correctly complete the upgrading of stock reconciliation that day. That manifested when they tried to balance yesterday."
The helpline devised a workaround but, as we would read on in the letter, the backlog soon developed of 100 calls by 3.30 pm that day. Mr Baker goes on in his letter to suggest that the helpdesk eventually advised subpostmasters not to wait to balance.
You will wish to investigate how incidents like this were handled by the support services generally.
That can come down, thank you.
You will hear evidence of a system known as PowerHelp, with a capital $P$ and capital $H$. This was the system the helpdesk used to manage calls. It was an important system because it was the main gateway into the remainder of support services. The helpdesk was tasked with assigning a priority to each call. Please could I ask that POL00000912 is brought up and can we turn to page 11 of this document, please. This is part of the support services operations manual. Can we zoom in on the table in the middle there, with 25

I should say that document can come down. Thank you.
As would be expected for first line support, it was intended that the helpdesk or service desk would be able to rectify some issues raised by subpostmasters without referring it up to the second line support. It's obviously important for each level of support not to refer up calls unnecessarily. To do so risks overloading the higher levels of support, drowning out the potentially more serious problems on which they should be focused.

The helpdesk had access to a resource known as Known Error Logs, also known as KELs. This was a searchable database maintained on an intranet and I'm going to shortly take you to an example of a KEL. It documented previously identified issues in Horizon that contained authorised workarounds or authorised further action where available. This was supposed to provide a resource to first line support to resolve calls themselves. You will wish to consider how effectively the first line support used the KELs database to resolve subpostmasters' technical problems more quickly and avoid overburdening upper lines of support.

Can I turn briefly to second line support, provided by the System Management Centre, the SMC. It had at least two core roles. The first was to act as
the " $A$ ", the " $B$ " and the " $C$ ". Thank you.
The table here sets out a scale of the prioritisation for calls. The words obviously speak for themselves, but in summary, priority A was for issues preventing the branch from processing business. Priority B would involve a problem that restricted business but did not cause it to cease altogether. Priority C was for those cases where there was a problem but one that did not affect the trade of the business.
Lastly, priority D was for internal problems not related to a Post Office.

I pause here to note that how service tickets were prioritised may be an issue that you will wish to consider. Mr Justice Fraser's finding in the Horizon Issues judgment at paragraph 493(1) that:
"Fujitsu routinely assigned non-critical Category C to matters that were really very important in their own right in any event, but of extreme importance to SPMs whose branch accounts were being directly affected."

His Lordship noted that category A and B priorities could attract contractual penalties for Fujitsu but he made no findings on whether that affected the prioritisation of calls. That's something you may wish to consider in the course of the Inquiry.

As would be expected for first line support -26
a traditional second line of support and try to investigate problems that the first could not resolve. This is described in POL00000912 at page 11 where we see the responsibilities of the SMC.

Unsurprisingly, it was supposed to act on its own where a service ticket identified a problem for which there was an authorised workaround. The SMC had an important role in respect of these problems that did not involve a workaround. Again, unsurprisingly, it was to pass over to the SSC any new problem that had not been identified before. However, where the problem had occurred before and had been raised with the SSC, the SMC was only to link the new call to avoid the duplication of work.

Again, these may seem trivial matters but you may wish to investigate how the SMC acted as a filter for the SSC. As I will set out shortly, the SSC was a vital body of third line support designed to investigate potential systems.

You will hear from Mr Cipione on how the failure to filter calls properly affected the service the SSC was able to provide. In particular, in paragraph 15.1.3 of his report, Mr Cipione notes that:
"The fact that the SMC did not filter lower-level issues meant that the SSC was burdened with performing 28
this triage. This extra work delayed the SSC from addressing the true technical issues within the Horizon system."

There are indications that the SMC made improvements in filtering calls. The reference to that is page 10 of POL00029245. That's an issue that you will wish to investigate throughout the relevant period.

Can I draw your attention to a second role of the
SMC, and that was to monitor Horizon for events that would indicate that a problem has arisen. Please can we bring up POL00029425.

This a KEL -- you can see this three lines from the
top -- created by John Ballantyne -- you can see that against the word "Raised" on the fourth line -- on 12 February 2010, again, "Raised: by John Ballantyne, 12/02/2010". It's in relation to receipts and payment mismatches in Horizon Online. This is a standard form print of a KEL, something that you're going to become very familiar with over the next few months.

There is an alphanumeric reference at the top of the page, in this case "ballantj1759" so it starts with letters from the initial author's name followed by numbers.

At the foot of the screen, under the heading
"Symptoms", the KEL states that a counter error event 29
themselves to interrogate the data upon which Horizon operated to determine whether a discrepancy was a user fault or a system fault. You will wish to consider how effective the SMC was in carrying out this role.

That can be taken down. Thank you.
Can I turn to third line support briefly. The
System Support Centre, the SSC. Please could we look at POL00000912. Thank you.

This is the "CS Support Services Operations Manual", which describes the support services provided by, at that time, Pathway Customer Services. Can we turn to page 8, please, of the document.

The SSC is described at the top under paragraph 3 as being:
"Responsible for all support activities, and, in particular, it provides third line support for all applications in the Pathway estate."

Then if we look at paragraph 4.1, in the second part of 4.1, this document describes that:
"The aim of the SSC is to provide a support capability to Pathway that resolves technical problems in the minimum time and with the minimum amount of disruption to the service. The SSC aims to provide a centre of technical expertise for Customer Service, providing technical advice, guidance, and expertise
has been generated and it gives an example. You will see in this example that the figure after
"totalReceipts" does not match the figure for "totalPayments". You can see three lots of text in under "Symptoms":
"totalReceipts=250016.45, totalPayments=-200016.45."
So the figure after "totalReceipts" does not match the figure for total payments.

If we scroll down the page, you will see under the heading "Problem", the problem section of the KEL states that this event was generated when there was a payments and receipts mismatch on a counter balancing report. It indicated that there was a software error or data corruption.

The KEL goes on to note that the event had been generated by a number of software faults previously. For present purposes, the key point here is under the "Solution". There is an instruction to the SMC, you can see that under the first part of the heading "Solution":
"SMC/counter eventing team: raise a B priority call and send to SSC if you see this event ..."

This demonstrates the role the SMC had in identifying from the Horizon System when bugs, errors or defects had manifested. This was an important role in circumstances where subpostmasters were unable 30
relating to all parts of the Pathway [service]."
Then if we go forwards to page 9 of the document, please. Amongst the list of responsibilities, if we just highlight number 7, please. One of the responsibilities of the SSC was to maintain the KEL database. Accordingly, it was incumbent upon the SSC to maintain KELs adequately to enable the first and second line support to act as a filter.

It is clear that the SSC was at the heart of the support services provided for Horizon. It's a highly relevant body for several issues that you will be required to investigate. In particular, it's central to the investigation and rectification of bugs, errors and defects in Horizon. Its work was, moreover, foundational to the advice and assistance that subpostmasters would receive. You will therefore wish to consider the adequacy of the operation and the services provided by this body with due care.

Can I turn to PinICLs and PEAKs, and investigating bugs, errors and defects.

That document can come down, thank you.
You will hear about the systems that the SSC used to manage service tickets. The first iteration of that system was called PinICL, which I referred to yesterday in relation to Phase 2. The second manifestation of the 32
system was called PEAK. The new PEAK system was 1 explained in a user guide on 8 October 2004 -- to which 2 you will be referred in due course, and which can be found at FUJ00079926, as a system used to record information of calls and other investigations into the relevant problem.

I referred you to a PEAK earlier in respect of training. The efficacy of the PinICL and PEAK system is important for two reasons: firstly, it was the centralised location for storing data relating to a service ticket, whether a call or evidence of an investigation. In that regard, the efficacy of the system would affect the quality of service provided to subpostmasters. Second, it was important for wider system issues. It was important to avoid duplication of PEAKs, duplicate PEAKs, or to identify linked problems using the system. These are issues that you will consider in due course.

An issue you will wish to investigate is how support services like the SSC investigated problems with the third-party software. You have heard that a fundamental building block of Horizon, Riposte, was provided by Escher. Can we look, please, to FUJ00083596 and can we go to the second page, please, and look at the email in the middle of the page. Thank you.
bugs that had the ability to affect balances. You will hear evidence on a bug that became known as the Callendar Square or Falkirk bug. This was an error in the Riposte system. It occurred when a subpostmaster tried to transfer from one stock unit to another. The sending unit would successfully record that the transfer had been sent but the receiving unit would not register the receipt.

That document can come down now, thank you.
This could result in the subpostmaster repeating the transfer, and whilst the transfer would appear to be unsuccessful, the sending stock unit would be depleted. This would, in turn, lead to a discrepancy. We can see evidence of this in POL00028984, being an email from Anne Chambers, that concerned the Callendar Square bug, which is described as having "been around for a years and affects a number of sites most weeks".

Mr Justice Fraser found that this bug started from the year 2000 and you will, in due course, be referred to PinICLs over number of years describing a problem with a Riposte log. What you will wish to know is why this problem was not addressed, and addressed earlier. In summary, you will wish to investigate the role that the SSC played in identifying bugs, errors and defects, in advising subpostmasters on the same and then

This is an email exchange of 17 April 2001 between Gareth Jenkins and Brian Orzel. Mr Jenkins asked in the first email on a way of listing "current Escher-Dev PinICLs". We understand this to mean incidents that had been raised that required third or fourth line support from Escher in relation to Riposte.

Mr Jenkins wanted to go through those PinICLs to see which may be affected by upcoming releases, and he says:
"My belief is that many of them can be 'lived with', in which case they need to be downgraded to $D$ (or at the highest C)."

Then back to the first page of the document, please. Mr Orzel responds with a list of the PinICLs, they're set out in the bottom part of the email and over to the next page, and states:
"As to the PinICLs themselves, I think that it makes good sense to postpone them from last-minute fix releases, but given the amount of money we pay for support, when we have a full regression cycle like (presumably) S10, I would want them ALL fixed, including the $D$ priorities. No exceptions. Chris has the final say of course ..."

You will wish to investigate how potential bugs, errors and defects in Riposte were investigated and rectified. Mr Justice Fraser found that there were such 34
in resolving them. You will hear from witnesses who explain the general processes described, but you will also wish to investigate actually how bugs, errors and defects were, in fact, resolved.

Can I turn to remote access.
The SSC had a significant role in another area of interest to the Inquiry, namely remote access. I will return to remote access when, in a moment, I deal with modifications.

I raise it now in respect of the SSC's use of these privileges, remote access privileges.

We will see -- it needn't be turned up now -- from POL00000912, that the SSC had access to the live system which, according to that document, "can be used to correct data on the system when it has been corrupted in some way".

That document goes on to describe a designed process for correcting, originating from an Operational Correction Request or an OCR.

The use of the OCR system and how it was controlled are both areas which you will wish to give careful consideration to, and you will be referred to what's called the Operational Change Process, known as OCP, as described in documents such as POL00029282.

The possibility of remote access was not limited to

OCRs and OCPs, you will hear evidence of various ways that teams at Fujitsu could access and could edit live data and you will be referred to documented concerns about the use of remote access.

Now, I'm going to give two examples. Firstly, can we bring up FUJ00088036 and can we turn to the introduction of this document, which I think is at page 9 and enlarge that. Great, thank you.

This introduction explains the background to the document and its purpose, and it was made, the document, against a background of lack of audit and control mechanisms on the administration of the live Horizon estate. This is a document that you're going to wish to consider as a whole carefully during the Inquiry. But can I just highlight at the moment, please, paragraph 4.3.2 of the document which is on page 15. Under "Third line and operational support", it says:
"All support access to the Horizon System is from physically secure areas. Individuals involved in the support process undergo more frequent security vetting checks. Other than the above controls are vested in manual procedures, requiring managerial sign-off controlling access to post office counters where update of data is required. Otherwise third line support has:
"Unrestricted and unaudited privileged access
"The design must define how the current method used by SSC to access counters is prohibited. The BI2 release included a Microsoft supplied security hot fix that closed off the security loophole being exploited by the SSC. A new route has been supplied ..."

We needn't read on.
You will wish to investigate how the SSC and other teams at Fujitsu had used remote access before this report and as referred to in this report as the security loophole being exploited by the SSC.

You will be interested to hear evidence on how such remote access was managed following this design and whether this document and the design that it introduced, addressed the concerns identified in it.

Following on from that, the second document involving remote access, to which I should draw your attention, is FUJ00089756, this is a PEAK. It's PEAK PC0208119. This was referred to Mr Justice Fraser in the Horizon Issues judgment and, at the foot of the screen that's now displayed, under "Impact Statement", you will see that it says:
"1. SSC users affected have more access than is required to database resources. This is contrary to security policy."

Then 3:
(system admin) to all systems including post office counters PCs ..."

Secondly:
"The ability to distribute diagnostic information outside of the secure environment; this information can include personal data (as defined by the Data Protection Act), business sensitive data and cryptographic key information.
"The current support practices were developed on a needs must basis; third line support diagnosticians had no alternative other than to adopt the approach taken given the need to support the deployed Horizon solution.
"There are however no automatic controls in place to audit and restrict user access. This exposes Fujitsu Services Pathway to the following potential risks:
"Opportunity for financial fraud;
"Operational risk -- errors as a result of manual actions causing loss of service to outlets;
"Infringements of the Data Protection Act."
You will also wish to note in this document on page 16, please, just over the page, under the first bullet point in paragraph 4.7, which is at the bottom:
"The following security requirements are specified for support of Pathway systems:

38
"Perceived Impact: The customer is not aware of this problem or change."

This PEAK goes on to state that SSC users had access to a role called APPSUP with extremely powerful privileges and, indeed, we'll find an email from Anne Chambers that's been copied into the PEAK, stating "When we go off piste we use appsup". The Inquiry has sent Rule 9 requests concerning how remote access was used, and we intend to call witnesses to speak to these issues. Sir, you will wish to consider the extent of the remote access privileges available to Fujitsu who had access to them, and the adequacy of the audit and security measures in place.

Can I turn to another third layer of third line support -- that document can come down now -- the Management Support Unit, MSU, which was tasked with the identification and resolution of reconciliation incidents. It was moreover responsible for identifying and raising problem incidents where it detected a series of similar reconciliation incidents.

Please could we turn to the "TPS Reconciliation and Incident Management Procedure" at FUJ00001627. This sets out the procedures for managing identified errors in data or reconciliation.

The MSU was responsible for monitoring a series of 40
reports known as Transaction Processing Service
Reconciliation Reports. We can see that at page 8 of
the document -- maybe I mean page 9 . Over the page, please, under "Introduction".

In summary, it consists of seven reports produced daily that would show reconciliation errors, such as receipts and payment mismatches. An error would, having been identified, lead to the MSU raising a business incident, which would be logged by the helpdesk. And you will hear in evidence reference to BIMS reports, which are Business Incident System Management reports, and also hear reference to the Manual Error Reports. These reports only concerned the symptoms of a problem, such as the fact of a discrepancy, rather than the causes.

The causes of the error were handled by different processes, of which you will hear, such as system incident logs, problem management, incident or defect management, and will be referred in evidence on how business incidents were handled. In particular, you will wish to examine the Business Incident Management System operated by Fujitsu and you will wish to investigate how such business incidents were managed individually and collectively.

Fujitsu's fourth line of support -- that document 41
come to in a moment.
The issues for you to consider are set out in issues
18 to 28 of our list of issues. Some of the
modifications you will hear about were designed to
resolve known errors and issues with Horizon. Others
enforced policy decisions informed by the approach that
the Post Office wished to take, as regards the disputes
procedure between it and its subpostmasters. You will
wish to consider in both types of cases the specific
factors that led to those changes taking place and
whether adequate steps were taken to review the effect of those changes.

As part of that analysis, you will wish to consider
how subpostmasters' feedback was accumulated and reviewed if at all, and if that was sufficient.

The most noteworthy modification provided by policy
was the decision to remove the suspense account for disputed sums when subpostmasters rolled over from one trading period to the next. This was referred to as the IMPACT programme. Prior to 2006, when the programme was rolled out, subpostmasters were able to post cash discrepancies in a suspense account where discrepancies were found and to roll them over into a new trading period.

After conducting a feasibility study in the early
can come down now, thank you -- was engaged where the third line had found evidence that may indicate a fault in the Horizon software itself or it could not otherwise establish why an incident occurred. That is described in FUJ00079425. You will wish to investigate how fourth line support operated to address identified systems in Horizon. A further issue to investigate is how fixes to Horizon were pushed out.

A meeting existed called the weekly Release Management Forum or RMF. The RMF is described as being responsible for determining what fixes to develop, and their associated risks, and whether to roll out a fix before a planned major software release. There is no need to turn it up but we can see that description at POL00000912, page 25.

Whilst this forum appears to have been designed to plan when fixes were made, the procedure goes on to provide for the options of emergency fixes being rolled out more quickly and we will, in due course, examine how these procedures were used in the rectification of bugs, errors and defects.

Before the break, can I turn to modifications. You will hear evidence on the modifications made to Horizon over the course of its lifetime, both as Legacy Horizon, as I've described it, and Horizon Online, which I will 42

2000s, it was decided to remove this facility so that subpostmasters were required either to make shortfalls good with cash on the spot or to undertake to settle centrally in order to roll over. Subpostmasters were unable to continue trading unless they did those things. As such, as the result of the IMPACT programme, their choices, when faced with a discrepancy at the end of a trading period, were to make good the difference, settle the difference centrally or to cease to trade.

I will come on to address the limited mechanisms by which subpostmasters were subsequently able to dispute sums.

The IMPACT programme was authorised and supported by the incumbent Post Office finance director, Peter Corbett, and the business process architect was David Parnell. It had a very high approval within the Post Office itself. It was developed, as with other modifications made to Horizon with Fujitsu. The shape of the IMPACT programme was set out in a number of reports, including one entitled "Accounting \& Cash Management Programme: Conceptual Design", at POL00038870.

In this document, under a section entitled "Accounting, Reconciliation and Settlement, including Debt Recovery and Branch Control", the key priorities 44
for ten minutes or so.
SIR WYN WILLIAMS: That's fine, Mr Beer. When you say ten minutes or so, shall we realistically say 11.35 , 15 minutes, for everybody to have a rest?
MR BEER: You're very generous, sir. Thank you.
SIR WYN WILLIAMS: Okay, fine. See you in 15 minutes.
(11.20 am)
(11.35 am)

MR BEER: Can you see and hear me?
SIR WYN WILLIAMS: All set.
MR BEER: Very good. and the Ping Fix project. These was considered by terminals were on one computer system operated by branches to sell Camelot products. transaction corrections to ensure consistency. In the words of Mr Justice Fraser, the Ping Fix was about
described included:
"[i] Refocus on Debt Recovery (financial recovery of money), target 95\%
"[ii] Only 10\% of discrepancies are actually debt
"[iii] Establish a central debt monitoring
environment to enable the identification of debt with a high degree of accuracy ...
"[iv] To increase accounting control in branches."
As if the objectives were not clear enough, it was
further elaborated in a subsequent document called
"Branch Trading Reporting, Management and Control and
Transaction Management Conceptual Design", POL00038878, that:
"By the end of a monthly trading period, branches
should be required to make good discrepancies between
Horizon generated cash and stock positions and the
actual physical position determined by branch office
staff. To help facilitate this, existing Horizon
facilities that permit branch staff to post cash
discrepancies to a cash suspense account will be removed."
You will hear evidence to the effect that the reason why this change was made was because of a sense that the suspense account was being used to hide disparities. It is obvious that, as a result of this modification, 45
for you to give the shorthand writer a break and break

Can I turn to another type of modification, where
modifications were required because of issues or errors
in Horizon. You will hear about the so-called Ping Fix Mr Justice Fraser. It was introduced in 2012 because of the issues caused by the fact that the National Lottery Camelot but Horizon was the system being operated by

The Post Office had to issue a high volume of

## (A short break)

subpostmasters were put in a position where it was more difficult to dispute shortfalls or discrepancies. Indeed, that was the very point of the change being made: to enable the Post Office itself to have greater control over the accounting done within the branch. It pushed subpostmasters into accepting by default the discrepancies that appeared on Horizon.

I wish also to highlight the involvement of Gareth Jenkins of Fujitsu in the IMPACT programme. He was heavily involved in the development of the software releases involved in the IMPACT programme. We can see that at FUJ00085125. As you will see and hear later, he was heavily involved in many of the issues to which this Inquiry relates.

You will wish to consider the effect that this change had on the ability of subpostmasters to dispute any alleged shortfalls and to consider how appropriate the change was in circumstances where there were a number of errors, bugs and defects present. You will want to investigate whether there were less draconian options available to the Post Office to meet its identified business needs, whilst allowing room for challenging discrepancies at the end of a trading period.

Sir, that's an appropriate moment, if it is suitable 46
"remedying a deficiency in the functionality of Horizon".

A feasibility study carried out in contemplation of what eventually became the Ping Fix was firmly in development by March 2009. We can see that from FUJ00091215. At that time, the process for identifying any errors was that the Post Office Products and Branch Accounting would "compare the data coming from Horizon with the direct feed they have from Camelot. Where they differ, then the transaction corrections are issued to the Branch to rectify the situation, since it is expected that the Camelot feed is more reliable than the data received from the Branch".

This was carried out manually with individuals reviewing the transactions. The exercise resulted in an extremely high volume of transaction corrections being issued to correct the position.

This is just one example but you will wish to consider whether this need to check manually all transactions against Camelot for accuracy should have alerted the Product and Branch Accounting Team and the Post Office to the fact that Horizon data was not infallible and, if these issues were chalked up to being a matter of user error, whether this should have resulted in a particular training programme being 48
carried out, rather than an extremely high volume of 1 transaction corrections.

Can I turn to Horizon Online. The biggest
modification or change over the course of the lifetime of the system was the migration from Legacy Horizon to Horizon Online, in 2010. As you will recall, the structure of the legacy system meant that data had to be held at the branch itself, pending a connection to the Horizon databases. This was done with software known as Riposte. From 2006, the Post Office and Fujitsu were already in discussions to develop what was described as an HNG-X migration strategy and were negotiating the basis on which to proceed.

We can see that at FUJ00002012. Over the subsequent years, the two parties worked together to develop what would become Horizon Online's first iteration, HNG-X.
You will hear evidence as to what the Post Office's requirements for acceptance amounted to -- that's at POL00032999 -- and consider whether these ensured Horizon Online functioned adequately. As I will come on to address in a moment, you will also wish to consider whether the Post Office had the relevant information to make a decision as to whether to accept Horizon Online.

Things did not start well for Horizon Online. The high volume rollout had to be suspended because of the 49

Penelope Thomas, dated 22 June 2010, was that the Horizon Online application was duplicating transaction records. In FUJ00097058 she wrote:
"The HNG-X application does not identify or 'discard' duplicated records and thus duplicated transactions are appearing in the ARQ returns."

She went on to say that:
"Further analysis identified on 22 June that approximately one-third of all ARQ returns generated under the HNG-X application have duplicated transactions included."

At the time that her report was written, the presence of this issue had not been communicated to the Post Office and she highlighted that there was a need to identify cases that have progressed to prosecution and to identify whether duplicate records were included.

When Ms Thomas sent this report to Fujitsu colleagues, Gareth Jenkins commented:
"In summary, any detailed analysis of the finances of a Branch which is done with duplicate transactions without realising that there are duplicates (and so removing them) will give incorrect results."

FUJ00097046.
When Ms Thomas asked whether she should inform her counterpart at the Post Office of this issue, she was
failures to migrate, and you will hear evidence as to whether this could have been avoided and the reasons why it happened.

On 19 February 2010, Alan D'Alvarez, who you will be hearing from in the Phase 2 hearings, sent an email to other Fujitsu employees informing them that there had been a failure to migrate all 19 of the post offices that were supposed to migrated that day. That's FUJ00098168. This was described as being a "Major Incident". In a follow-up email, Mr D'Alvarez informed his colleagues that a senior member of the Post Office team, Mike Young, was "extremely angry and running around looking for someone to shoot".

A few days later, on 24 February 2010, Mark Burley, the HNG-X programme manager at the Post Office, wrote to Marilyn Stoddart of the NFSP to inform her that 144 post offices had migrated to the new system, but the migration of the next 100 had to be paused. That's NFSP00000061.

He explained that some of the branches that had migrated had had problems, including being unable to use the system at all for some of the day.

There were further issues identified by Fujitsu after Horizon Online went live. One of those, as summarised in a note produced by Fujitsu employee 50
told:
"Please do not make any communication on this issue with [Post Office] for the moment. We've been looking at this today and are waiting to determine if a proposed work around is adequate."

FUJ00097046.
The reason given for holding off was given by Guy Wilkerson, who stated:
"I'd hate to have the Post Office raise this as an issue with HNG-X Acceptance Board on Tuesday."

We're sending Rule 9 requests to those responsible for taking these decisions on behalf of Fujitsu. They will speak to the critical issue of what was communicated to the Post Office and when. You will need to consider whether, where Fujitsu knew that there was an issue, adequate steps were being taken to bring this to the Post Office's attention or, alternatively, whether Fujitsu acted to protect its own reputation and its own commercial interests.

Later in 2010, the Post Office carried out its own review of Horizon and that's both Legacy Horizon and Horizon Online. Rod Ismay, the head of Product and Branch Accounting, was asked to carry out a review of the data integrity of Horizon and Horizon Online by Dave Smith, the managing director at that time.

On 2 August 2010, Mr Ismay produced a document entitled "Horizon -- Response to Challenges Regarding Systems Integrity". We can see that POL00026572.

Mr Ismay described the paper as being "compiled as an objective, internal review of POL's processes and controls around branch accounting". It's unclear on what basis it was asserted to be objective. In its introduction, it was acknowledged that there had been coverage in the national media that Members of Parliament had shown an interest in certain cases and, in the executive summary, Mr Ismay stated:
"The allegations to which we are responding follow on from cases where thousands of pounds were missing at audit. We remain satisfied that this money was missing due to theft in the branch -- we do not believe the account balances against which the audits were conducted were corrupt."

He relied on "the extensive controls" that Post Office had in place in support of that assertion, along with the training and the support that was in place.

Critically, he stated:
"The integrity of Horizon is founded on its tamper proof logs, its realtime backups, and the absence of 'back doors' so that all data entry or acceptance is at branch level and is tagged against the login ID of the
loss/gain. So POL can't do this but Fujitsu can."
You will hear evidence from individuals who were
there at the time about what was known within the Post
Office about the ability of Fujitsu to enter such values remotely and we'll hear evidence from individuals with experience of working at Fujitsu. You will wish to consider how this fact impacted on the Post Office's confidence in its data integrity.

That can come down now, thank you.
Turning back to Mr Ismay's 2010 paper, as I've
already said, he relied on number of factors in support of his assertion that Horizon's data integrity was no cause for concern.

One factor he relied upon was the "Court Decisions" as he called them, that had found in the Post Office's favour. He highlighted three, as he called them, "landmark" cases. The first of these was the Clevelleys case in 2001. In that case, the subpostmistress was dismissed in 2001 soon after Horizon was introduced. Her lawyers produced a report showing how Horizon could have caused an error. The Post Office settled this case for $£ 187,000$ because it did not have the transaction logs to "refute" the claim.

The learning point from this case, as it was summarised, was to ensure that the Post Office had

53
user. This means that ownership of the accounting is truly at branch level."

Of course, as you know from the common issues judgment of Mr Justice Fraser, in fact Fujitsu had direct access to the branch databases. This was something that Lynne Hobbs, another Post Office employee, highlighted in 2010 in response to the report being circulated.

Can we look, please, at POLO0088956. Can we look at the second page of that document, please, and the email underneath "My reply to Mike and Rod", thank you. She says:
"I'm happy with the report and just have one observation.
"I found out this week that Fujitsu can actually put an entry into a branch account remotely. It came up when we were exploring solutions around a problem generated by the system following migration to HNG-X."

She described how this was resolved for Fujitsu to remotely enter a value into a branch account to reintroduce the missing loss or gain:
"One solution [this is the last part of that email], quickly discounted because of the implications around integrity, was for Fujitsu to remotely enter a value into a branch account to reintroduce the missing 54
transaction logs to back up its own allegations.
The second case referred to was the Castleton case in 2004, named after the subpostmaster involved, Lee Castleton, and you will recall that you've already had read evidence from Mr Castleton and his daughter, Millie Castleton, which was summarised to you during the human impact hearings.

Mr Castleton was made bankrupt as a result of the proceedings taken against him. Mr Ismay commented that that case "appeared to have put a stop to allegations".

The third case referred to by Mr Ismay was Alderley Edge in 2010. In that case, the subpostmaster pleaded guilty to false accounting, having been initially charged with theft. The judge in the case was noted as stating that he "had issues with the proof of size of the loss", and went on to state "there are issues relating to the Post Office computer system which I do not feel able to judge".

Mr Ismay said that critics had "focused on these comments rather than the fact that Mr Darlington had pleaded guilty".

Overall, he summarised that "the record of prosecutions does [not] support the assertion that subpostmasters have been guilty rather than Horizon is faulty".

56

Sorry, I'll read that again:
"The record of prosecutions does support the
assertion that the subpostmasters have been guilty rather than Horizon is faulty."

You may wish to consider whether the success of prosecutions mounted on the basis of Horizon was something that was capable of pointing towards the successful functioning of the computer system or, on the other hand, whether it contributed to the institutional belief of the Post Office that Horizon was invaluable.

Mr Ismay's report contained an appendix with input from Fujitsu. The author of that appendix was Gareth Jenkins. You will wish to consider whether individuals like Mr Ismay, who were charged with the task of examining the integrity of Horizon on the Post Office's behalf, had themselves sufficient technical expertise.

As to the input sought from the subpostmasters themselves about Horizon Online, you will hear evidence on how issues were raised with the NFSP which were then relayed to the Post Office and you will wish to consider whether this and any other input sought, was sufficient in the circumstances.

Can I turn to knowledge of bugs and errors.
It is settled that there were bugs, errors and defects in the Horizon IT System that had the potential 57
of the entire system.
You may consider that a series of bugs may do so, particularly if they have been present for a long period of time and especially if they had laid undiscovered for substantial periods of time.

Bugs, errors and defects feature throughout the list of issues and will be central to all of the phases. If I can refer briefly to the list of issues to delineate the particular questions you're asked to consider, and on which to make findings. We do not wish to suggest that these issues can be confined to one phase. It's likely that you well hear evidence on these matters throughout the hearings.

The first group concerns bugs, errors and defects, and relates to knowledge. This is at paragraphs 49(A), (B) and (E) of your list of issues, and paragraph 49 invites you to make findings on the state of knowledge or various people and bodies. You will also wish to consider the mechanisms that were in place to monitor Horizon to find and rectify such bugs, errors and defects. Those issues are captured in paragraphs 184 to 201 of the list of issues and will be dealt with in both Phases 3 and 6 . You will also hear evidence relevant to various parties' knowledge of bugs, errors and defects when you consider the pursuit of civil and criminal
to cause and did cause discrepancies or shortfalls in subpostmasters' branch accounts or transactions or otherwise undermine the reliability of Horizon accurately to process and to record transactions. Mr Justice Fraser found at least 12 such bugs, errors and defects in Legacy Horizon and 13 in Horizon Online.

The fact that an IT system would have bugs, errors and defects is not surprising. Indeed, it is likely that Horizon would not have been a headline grabbing project if the Post Office had not used data produced by it to pursue prosecutions and civil claims. However, you will, of course, still wish to examine the issue of the nature of the bugs, errors and defects within the Horizon System. In particular, you will wish to address the core questions of who knew what and when.

The answer to these questions are of fundamental importance to the Inquiry and will guide your views on culpability for the decisions to pursue subpostmasters in civil and criminal courts. You will, of course, wish to bear in mind what the relevant people or bodies knew about specific bugs at various points. But you will also wish to consider what was known about the overall totality of bugs, errors and defects because, speaking hypothetically, a single bug that caused minor discrepancies may not call into question the integrity
proceedings based on the data produced by Horizon.
Therefore, we do not intend to deal with knowledge of bugs and errors in full during the Phase 3 hearings; it is a theme that will run throughout the Inquiry. However, you, will hear a significant amount of evidence on the nature and extent of various bugs during Phase 3.

We are also investigating, by way of Rule 9 requests, what knowledge various teams within Post Office and Fujitsu had on bugs throughout the levels of management providing training, giving support, or resolving disputes. We will consider how that information filtered through to other parts of the organisations and beyond, in later phases, principally Phase 6.

Your Inquiry is investigating all of the bugs that were found by Mr Justice Fraser to have the potential to cause discrepancies in branches or affect the integrity of data within Horizon. Moreover, your Inquiry will investigate other potential bugs, errors and defects in Horizon that were not dealt with in the Horizon Issues judgment. You will wish to consider who knew what and when about all of those bugs, errors and defects, both individually and collectively.

It would be neither helpful nor proportionate for me to describe each of these bugs. I have already
discussed one of them, the Callendar Square bug, but I introduce four other bugs that you will hear evidence on in due course, namely the data tree failure discrepancies, phantom transactions, receipts and payments mismatch bug and the suspense account bug.

So, firstly, the data tree failure discrepancies bug.

This was bug Number 10 in Mr Justice Fraser's
technical appendix. A data tree is a hierarchical structure of data comprised of units called nodes, which contain data. There is a single root node, which is linked to other nodes, referred to as its children. Each child node may have further children connected to it. This creates a tree structure.

Legacy Horizon would use a data tree when using
an office snapshot as part of the balancing processes.
From the rollout of Legacy Horizon until at least the IMPACT programme, the system would prepare the snapshot by scanning the Riposte message store for relevant data, such as stock levels.

The design was that it would build the data tree by returning data from the various nodes in its structure. The defect we are concerned with here refers to a failure in Legacy Horizon to build the data tree properly. The failure to build the data tree was not 61
the amount of money involved.
The documentation states that this particular data
tree failure was resolved by a software release.
However, Legacy Horizon continued to use data trees for snapshots and balancing. Mr Justice Fraser found
evidence of similar reported issues in 2007, which your
Inquiry will consider. You will wish to investigate who
knew what and when about the potential for data tree build discrepancies.

Can I turn to the second issue, the second bug,
phantom transactions.
The issue of phantom transactions was labelled as bug 15 by Mr Justice Fraser, who made findings in respect of a series of incidents around 2001. The name of the bug, in fact, neatly describes the problem. Subpostmasters complained that Horizon was logging transactions by itself and without any input from a user. This led to a number of investigations by the SSC into several branches.

Can we please bring up FUJ00086682. This is PEAK PC0066391, and can we look at the entry at the foot of the page, at 13.09. That's it, thank you.

This summarises some of the investigations made by the SSC and you'll see from that that the conclusion is that there were four suspected potential causes of
identified by Legacy Horizon itself, so the snapshot was completed with missing data.

Can we bring up, please, FUJ00086553. This is PEAK PC033128 and it concerns a discrepancy that had been identified at the Dungannon branch and was linked to discrepancies at two other branches. Can we turn to page 3 and, at the foot of the page, please -- yes, under the entry 4 July 2000 at 10.40, "Root cause of stock unit integration problem":
"Data trees have been failing to build fully, and the system has not been detecting this. Consequently, discrepancies in the balancing have been occurring. In the case of Dungannon a whole Payments node was missing.
There have been a number of calls relating to this kind of issue."

Therefore, in this case, Horizon had failed to return data from a payment node when carrying out a snapshot for the Dungannon branch. It had a dramatic effect in that it failed to collect payments amounting to $£ 43,000$. Mr Justice Fraser found that this had the potential to affect branches if the subpostmaster chose to roll over from the snapshot and make good the discrepancy. You will wish to consider whether subpostmasters would have identified bugs like this where the discrepancies were not so stark, in terms of 62
phantom transactions. That's in the last three lines on this page, and over on to the next page. It reads:
"There are four suspected potential causes of phantom transactions, namely:
"Faulty screen or keyboard: resolution is to swap them out.
"Faulty screen power supply: resolution is to swap it out.
"User error: resolution is for users to follow correct procedures.
"External environmental influence: trying to detect and identify using ComTEst and system performance monitoring."

Could I just turn back to "User error". You might consider that user error cannot be a cause of a truly phantom transaction. Rather, user error is an answer or an explanation that points back to the user suggesting that they have entered the transaction, perhaps unintentionally. It's not really described properly as a phantom transaction. One can see how it would be very difficult for a subpostmaster to show that a recorded transaction was a phantom transaction, rather than a mere erroneous miskey by them.

However, in some cases, it seems that ICL Pathway support services would make it impossible for some 64
subpostmasters. I will refer you, without asking for it to be brought up, by way of example, FUJ00082401, which is another PEAK, PC0065021. This was referred to in the Horizon trial. A subpostmaster called the helpdesk to complain about phantom transactions. He had raised this complaint before but his service ticket had been closed, unjustifiably in his view.

But a new set of investigations started and, as part of those investigations, a Royal Mail engineer attended his branch on 1 May 2001. The PEAK records that Romec, that's the engineers, "have been to site today and have fitted shielding cabling and suppressors". That was to address the concern of a potential environmental cause. Some branches had protective equipment installed to block interference that could be caused by other electronics.

The note goes on to say:
"Romec engineer advises that he has witnessed
further phantom transactions whilst on site."
That, of course, provided important corroboration to
the subpostmaster's account, ie that whilst the engineer was on site he witnessed phantom transactions occurring before his eyes.

Further investigations ensued, but the master call ended by stating:

65
that was balanced by gains in other stock units.
It can be illustrated by way of example, in this case, a subpostmaster who operated two stock units for two counters. They transferred $£ 1,000$ of physical cash from one counter to the other but forgot to record this on Horizon. In this case there would be a $£ 1,000$ discrepancy between Horizon figures and the actual cash for both stock units, one a loss and one a gain.
However, the overall branch would be in balance because the loss and the gain cancelled each other out in the local suspense account.

The receipts and payments mismatch bug arose in that context. Where a subpostmaster tried to roll over a new stock unit into a new trading period and Horizon Online detected a discrepancy, the system would ask if it wanted to post the discrepancy to the local suspense account. The subpostmaster could post the discrepancy at that point or could press "Cancel".

If they pressed "Cancel" at this point, two things happened. Firstly, the discrepancy on the branch's PC would be set to zero and would, in effect, be lost. This would only affect the local PC and would not affect the back-end accounting system. Secondly, the subpostmaster would be taken back to a prior screen where they could do one of three things: print or review
"Phantom transactions have not been proven in circumstances which preclude user error. In all cases where they have occurred, a user error relate cause can be attributed to the phenomenon."

Decoding the language slightly, that must be erroneous. In particular, other service tickets refer to the hardware as being able to cause phantom transactions and, of course, in this case, a Royal Mail engineer saw the phantom transaction evolve in front of their eyes.

You will wish to consider the extent to which phantom transactions were properly and independently investigated and, again, consider who knew what and when about these nebulous potential defects.

Can I turn thirdly to the receipts and payments mismatch bug. This was a bug in Horizon Online and was the first numbered in the Horizon Issues judgment. It arose in certain circumstances where a subpostmaster tried to deliver a discrepancy into the local suspense account. I will briefly cover the local suspense account again. In summary, one could post losses or gains in a stock unit, into the local suspense account, prior to rolling over into a new trading period. This was helpful to branches with more than one stock unit. This is because an individual stock unit may have a loss 66
the trial balance of the stock unit again; reattempt to roll over the stock unit; or cancel the attempt to roll over the stock unit.

If the subpostmaster attempted the trial balance again, it would not show the discrepancy. This is because the local data with the discrepancy was set to zero. If the subpostmaster attempted to roll over again without cancelling, the stock unit would roll over with the corrupted local file showing a zero discrepancy. This created a receipts and payments mismatch. There was no explicit warning to a subpostmaster that this had occurred.

You will, in due course, hear evidence on how Fujitsu sought to identify when these issues had arisen by monitoring Windows Events, and you will wish to consider how effective the exercise was and what was communicated to subpostmasters regarding these issues.

Can I turn, lastly, to the suspense account bug.
This was number 3 in the Horizon Issues judgment. It was again concerned with the local suspense account and existed from 2011, being identified in 2013. In essence, the bug cause subpostmasters to see losses or gains in the local suspense account that simply had not arisen -- did not arise -- in the current trading period.

68

Fujitsu's support services concluded that this was caused by a change to an archiving strategy in 2011, which had itself been implemented to address another problem. Fujitsu found that the change affected some branches that deleted stock units, which had unresolved discrepancies posted to the local suspense account. Those losses and gains to the local suspense account were not deleted. Therefore, when the same trading period arose in the following year, the loss or gain posted in the local suspense account the year before would be put into the current day.

By way of illustration, a hypothetical branch posted a loss of $£ 1,000$ into a local suspense account from stock unit AA, as l'll call it, in trading period 9 in 2011. It then deleted stock unit AA. When it came to balance the trading period 9 in 2012, Horizon Online would erroneously enter the $£ 1,000$ into the local suspense account for 2012.

This problem was not identified by Fujitsu in the first year, 2012. It became aware of the issue in 2013, when a subpostmaster complained through the Horizon service helpline. To carry on my working example, if the hypothetical branch tried to balance in trading period 9 of 2013, Horizon Online would continue to show the local suspense account with the $£ 1,000$ loss from

I just wanted you to tell me.
MR BEER: Sir, you look as you always do.
SIR WYN WILLIAMS: Thank you.
MR BEER: Can I turn to the resolution of disputes between
Post Office and subpostmasters. This is part of
issue 41 to 48 , and the issues you will be asked to consider are: what practices and procedures were in place during the relevant period, regarding disputing shortfalls, discrepancies and transaction corrections; who was responsible for conducting the investigation into the disputed sums and what their qualifications were for the role that they were performing and whether they were adequate; the factors that influenced the scope of the enquiries and the conclusions that were reached, including whether financial considerations played a role; and whether there were circumstances where authorisation was given to place disputed items into a central suspense account and, if so, whether the procedure should have been adopted as a matter of course.

Later in the Inquiry, in Phase 7, you will consider whether the current procedures for disputing shortfalls, discrepancies and transaction corrections are adequate.

At its core is this question: were subpostmasters given a fair procedure for disputing sums of money that

69
trading period 9 of 2011. You will hear evidence in due course on Fujitsu's investigation of this problem, which it found affected 14 branches. You will hear evidence on how the 2012 discrepancies were dealt with at the time. You will wish to consider how long this bug occurred, being caused by an intended fix to an archiving strategy, and why it was not identified earlier. You will wish to investigate who knew what and when about those problems.

In the last few minutes I have summarised four bugs from a list of 25 identified by Mr Justice Fraser. You will hear evidence, I repeat, on more bugs, errors and defects in due course. This summary, however, gives a flavour of the varied ways in which the integrity of Horizon could be called into question. You will wish to consider what the relevant parties did with the knowledge that they did have about these bugs, errors and defects, both collectively and individually.

I now turn to the issue of the resolution of disputes between the Post Office and subpostmasters.
SIR WYN WILLIAMS: Mr Beer, before you do that, could you just tell me whether I look any differently on the screen, in terms of colouring, et cetera, because some of the lights have just gone out in my house. It doesn't matter if I look as I started this morning but 70
the Post Office claimed were owed to it? You will wish to consider in answering the questions I've just listed the evidence that you have heard in the human impact hearings of individual accounts on how the disputes process was handled. You will also hear evidence from employees of the Post Office and Fujitsu, who played a role in evaluating the validity of individual cases.

I'm going to outline a number of separate issues as part of this part of the opening: first, the contractual obligations that subpostmasters had and the Post Office's general policy on losses; second, what it meant to select "settle centrally" at the end of a trading period; third, what transaction corrections were and the process for disputing them; fourth, the role of investigation; and, fifth, l'll finally touch briefly on the role of audits.

So, first, contractual obligations and policies on losses.

The starting point for dispute resolution is what the Post Office considered its contractual position to be. At its core was the position that the subpostmaster was liable for any shortfalls or discrepancies showing as a loss in his or her branch. This position was maintained on the basis that, if it appeared on the system and was not subject to a transaction correction,

72
then a loss existed. This loss had to be accounted for by the subpostmaster and it had to be made good.

These positions were firmly routed in the Post
Office's policies and practices towards subpostmasters.
Turning, for example, to the Post Office's "Losses
Policy -- Overarching (Branches)" of 2006, if we can
look at POL00030562 and turn to page 5, we can see, if
you scroll down, please, at the foot of the page under
"Section 2 -- Liability":
"In general, agents are liable for all losses,
including counterfeits, under their contractual
responsibility. DMB staff [that's directly managed
branch staff] are covered by the conduct code."
This particular expression of the policy is from
2006 but it reflects the general position.
You will also recall that this was the Post Office's
firm position in the Group Litigation. You will hear
evidence as to what this deep-seated position meant when
it came to challenging the shortfalls showing on the Horizon System.

That document can come down.
As part of Phase 4, which I will come to later, you
will go on to consider the civil actions taken against
subpostmasters to recover these losses and will consider
the Post Office's decisions to prosecute individuals for
so, in due course, you will have his evidence on what
his guidance note was intended to achieve but we can understand a little from the document's plain English.

There's a section which says: "What happens when you 'settle centrally'. This stated:
"If you have a loss or gain in your branch and
choose to 'settle centrally', this means that you accept
the loss or gain and your branch is returned to
balance", and then placed in brackets, "(unless you
follow the dispute process)."
The guidance went on to say that once "settled
centrally" has been selected the loss is transferred to the "customer account". It then said:
"The customer account is managed by Product and Branch Accounting, and we then start the debt recovery process to recover the outstanding amounts."

In other words, unless you raise a dispute, the Post Office's debt recovery process is instantly engaged. From that moment onwards, the shortfall was treated as a debt owed by the subpostmaster.

The guidance plainly discouraged subpostmasters from trying to dispute discrepancies. Under a heading "Resolving branch discrepancies", Mr Winn wrote:
"It is your responsibility to resolve branch discrepancies. If you believe a transaction correction
theft and false accounting, on the basis of the data shown on Horizon. These positions, again, were all on the basis that the Horizon data showed an actual loss that had to be accounted for. It's the thread that runs through the entirety of this Inquiry.

I turn secondly to consider the meaning of "settle centrally".

The real sting in the tail to the principle that subpostmasters were responsible for losses shown on Horizon was the obligation imposed on them to accept those losses at the end of a trading period. As found by Mr Justice Fraser in the common issues trial and as I mentioned a moment ago, it is accepted that, following the IMPACT programme under Legacy Horizon, a subpostmaster had two options at the end of a trading period: settle centrally or make good the discrepancy with cash. There was no option to indicate that an amount was disputed on the Horizon System itself.

You will hear evidence about the process by which disputes were raised by subpostmasters when a shortfall or discrepancy arose.

By way of example, in 2009, the branch improvement and liaison manager, Andy Winn, issued guidance on what "settle centrally" meant. That's at POL00032558. The Inquiry has sent a request for evidence to Mr Winn and
is needed to resolve the discrepancy you should contact the appropriate department in Product and Branch Accounting via the NBSC."

As I have already explained, the NBSC, the Network Business Support Centre, was the Post Office's telephone support service. So the same team that was supposed to offer advice and assistance was charged with resolving disputes between the subpostmaster and the Post Office.

The guidance went on to inform subpostmasters that they could make written submissions if their disputed discrepancy was not allowed and:
"... the debt recovery process will then be suspended pending a written response."

To be clear, the debt recovery process was not suspended pending the determination or subject to any formal written appeals process. It was said to be suspended pending a written response. The written response, it can only be assumed, would be sent from the relationship manager to whom letters were to be addressed when raising a dispute.

As you have heard, many subpostmasters felt that the process for disputing a discrepancy lacked any kind of transparency or due process and you may wish to consider whether the process set out in the guidance note, alongside the further evidence that you will consider,
enabled subpostmasters to have any real chance at 1 successfully disputing a discrepancy.

Can I turn to transaction corrections. You have
heard me mention the term "transaction corrections"
a number of times already. They were the method by
which the Post Office could remedy discrepancies on
Horizon that it accepted to be inaccurate. I have already mentioned the incidences involving Camelot transactions. As set out in the guidance produced by Mr Winn, they could be requested by subpostmasters should they wish to dispute a discrepancy.

A number of issues with the process of issuing
transaction corrections were documented over the years
and I'm going to use one of the reviews of a transaction process as an example.

In October 2007, a document entitled "Transaction Corrections Process Review for Agency Branches" was issued by the Post Office. That's at POL00039024. It explained that the Product and Branch Accounting Team's objective was to balance the ledgers between clients and Post Office branches. It acknowledged that:
"... how if any discrepancies are found during the process of matching the [client] data, a transaction correction is issued to the relevant Post Office to rectify the account. This usually has a financial 77
centrally. This delays the process in recovering any outstanding monies, and can be used as a deliberate delaying tactic in order to delay making payment."

It is important to note two points. First, of course, that the subpostmaster had no option but to settle centrally or make the discrepancy good at the end of the month in order to continue trading. Secondly, the delay that would have been experienced on account of this system, in respect of debt recovery, would have been a matter of weeks, yet the key concern appears to have been the delay in recovery, rather than in ascertaining whether the subpostmaster was in fact correct. It was also felt that having to refer the dispute to a team outside of Product and Branch Accounting was further contributing to the delay. The report recommended that this referral to an outside team be removed, and any dispute be returned to the person who had issued the correction.

The third issue to be raised was the timeliness of recovering debt. While this was the subtext of the second concern voiced, it was also the more explicit concern of the third issue voiced on transaction corrections. It was felt, according to the report, that the need to issue "a piece of paper" to recover debts from subpostmasters when they had elected to settle
impact on the branch, either by the subpostmaster having to make good any shortfall in cash ..." and then it continued.

The document went on to identify issues with the process for issuing transaction corrections. They included, firstly, the timeliness of transaction corrections. The document highlighted that in some cases it had taken two years for transaction corrections to have been issued to subpostmasters. It stated that:
"This leaves the subpostmaster feeling frustrated that they are being notified to rectify a mistake that they may not remember, or where the evidence has been destroyed that would support a dispute to the transaction."

The Inquiry may agree that this is an entirely understandable reaction as to why postmasters might feel that way.

Secondly, however, the process for disputing the transaction correction was subject to criticism on the basis that it appeared to be too lenient to subpostmasters. It says in the document:
"The current process for disputing transaction corrections allows the subpostmaster to challenge the error at every stage of the process, even after pressing the button on the Horizon System to settle the debt
centrally was "resource hungry" and caused further delay. It also described how subpostmasters had the opportunity to delay the recovery of debt for 27 days if they settled centrally.

It's clear from this document that, notwithstanding the ability to dispute a transaction correction, the Post Office viewed any discrepancy or shortfall in the form of a loss showing on Horizon as a debt, and that the dispute process merely delayed the recover of that debt.

After this review in 2007, the process of transaction corrections was changed. As of 2011, the process was captured in a slide show at POL00039038. It needn't be displayed. The process remains similar to what it was before, but the need to refer the dispute to another team was removed. As l've explained, the first part of the process was comparing Horizon data with that of the Post Office's clients. The general position was that the Horizon data was assumed to be incorrect where it did not match the client's data, and a transaction correction was issued accordingly. We will be asking witnesses whether the same deference was accorded to subpostmasters and if not, why not.

It appears from this document that some
subpostmasters referred to in this context are called 80
"multiple". I pause there as I wish to suggest that you may wish to consider whether language used to describe people involved had any impact on how they were perceived by those tasked with assisting and investigating them. Where a subpostmaster was issued with a transaction correction which they disputed, they could gather evidence in order to dispute it. In response, having been referred back to the person who issued the transaction correction, that person had three options: one, agree the dispute and issue a reversal transaction correction; two, disagree the dispute and the transaction correction would stand; or 3, request more evidence from the branch.

As a result of this process, the person who issued the original transaction correction, a member of the Product and Branch Accounting Team had a great deal of power in assessing whether a transaction correction should stand. They were ultimately able to decide whether to permit the subpostmaster's challenge or to refuse it. It was in their discretion to decide whether to give it the postmaster the opportunity to further substantiate their case and, as set out in Mr Winn's document, an appeal could be made to Mr Winn -- the same Mr Winn who suit the settle centrally guidance. At that stage, the subpostmaster was supposed to submit the 81
communicated to the NBSC teams, then the operatives could contact Fujitsu to see if there were any identifiable issues with the function of Horizon in that particular branch. You'll hear evidence about how the NBSC dealt with these issues being raised and how they communicated with the Products and Branch Accounting team in relation to debt recovery. You will also consider evidence about how the Post Office ultimately decided to resolve the complaints and whether the process was transparent and fair.

I will not deal with this now as there are differing accounts as to how this worked in practice, and the Inquiry is still in the process of gathering evidence on the issue.

If no dispute was made to the NBSC or using the transaction correction process, then the assumption was that a debt existed and was to be repaid to the subpostmaster. This seems to have been the case even where the application of basic common sense would have dictated that something had gone terribly wrong.

Picking just one example of this, can we look at POL00004403.

In this case, the branch which had been issued with a number of transaction corrections relating to the National Lottery (that's the Camelot issue to which
appeal in writing with "all the evidence available."
We have asked Mr Winn about the appeal process that he oversaw, and you will hear evidence about that in due course.

As part of this area of investigation, you will wish to consider whether the transaction correction process worked as it should, whether it was accessible to subpostmasters and whether it was a fair procedure, and you will hear evidence on the issue on whether, in practice, it required to a postmaster to defend a transaction correction.

Can I turn to investigations that were carried out by the Post Office in order to resolve a dispute that had arisen between a subpostmaster and the Post Office, and can I consider two forms of investigation. First, where a dispute was made in relation to a discrepancy to the NBSC or made clear their dispute in writing; second, where a dispute was not made through the official channels but which surfaced as part of the debt recovery process.

I'll come to the use of audits in due course. However, for the purposes of Phase 3, our attention will be on disputes that arose before the audits occurred or which arose independently of them.

Turning to the first scenario, if a dispute was 82

I have already referred) raised a point. In an email of 8 February 2007, a member of the debt recovery section of the Products and Branch Accounting team, Jacqueline Whitham -- you'll see her name at the top of the page -gave an overview of the problem. She summarised in the second paragraph that while a transaction correction for the lottery had been issued for a credit of $£ 22,778.40$, that credit had been "eaten up" or eaten into by a lottery transaction correction which was a debit for £34,028.

You will note that these transaction corrections, some of which we know were issued up to two years after the transactions to which they relate, are for extremely significant sums of money, and they would be large sums of money given that this branch in question was not a particularly large one and was run by a family, like many post offices.

If we look further down the page, under the -that's it, thank you -- we can see that the email before was sent by a Neil Barnard, who visited the branch to investigate the discrepancies that existed, and in this email Mr Barnard is requesting advice. We can see that from that last paragraph on the screen there:
"Although I have no previous knowledge of the branch, it would appear that the branch has been naive 84
in accepting all of the above without question and without any supporting evidence. As things stand, they will end up paying half of their remuneration back to cover these repayments, which would certainly affect the viability of the branch."

The obvious question is why this absurd position had not been picked up before. Looking further back in the email chain, which I won't do now, we can see that Mr Barnard was asked to investigate because the branch was already repaying an existing debt when a new debt was added to what was owed.

In the chain, we can see that a Mr Brian Trotter, who held the position of contract service manager, had sent an email requesting that Mr Barnard look into the position. We've sent a Rule 9 request to Mr Trotter, so in due course you will hear his evidence as to what the general practice was in cases like this.

In this particular case, the email sets out what he

## thought. He said:

"I think this warrants further investigation. Can you contact the branch advise [sic] that because a debt is already being repaid, this debt will need to be settled in full immediately. If the branch is not in a position to repay, I may have to consider their contractual position."

85

You will also consider the mechanisms by which the Post Office kept track of what the audits revealed and whether they took action in response. For example, in October 2004, a confidential report was written on branch auditing for the sixth period of the 2004/05 financial year. Can we look at that, please. It's POL00047544.

In the first line of the executive summary at the foot of the page, it was identified that a loss from cash accounts from the first six months of the year amounted to $£ 2.8$ million from approximately 1,000 audits. Of that $£ 2.8$ million of loss, $£ 1.9$ million was as a result of audits carried out in just 20 branches. In the context of puzzling over how this could be, the report observed:
"Although in some of these cases, there were indicators of errors being made which would be rectified by an error notice, there is also a significant risk that the losses identified in most of these cases will not be [covered]. It is also a concern that in spite of the size of the amounts of discrepancies, a precautionary suspension was not made in $35 \%$ of these cases."

The assumption appears to be that even though it seems as though errors have been made, the Post Office

We can infer that what Mr Trotter refers to as the "contractual position" means the potential to terminate the subpostmaster's appointment and so, even before an investigation has been carried out, Mr Trotter's position appeared to be that the subpostmaster's position may be vulnerable if they do not repay the debt in full. And so stepping back as part of your enquiries, you will wish to consider whether putting the onus on subpostmasters to dispute discrepancies or transaction corrections was fair or appropriate and, as part of that, you will wish to take into account the balance of power as between the Post Office and subpostmasters, together with each of those parties' access to relevant information, as to the veracity and accuracy of the losses that were shown.

I turn briefly to mention audit, which you will consider as part of Phase 4 of the Inquiry. You have, of course, also heard evidence during the human impact hearings as to how subpostmasters felt they were treated by the auditors and how experienced the people carrying out the audits were. You will hear further evidence about audits, how they were carried out, and you will in particular -- and when they were carried out -- and you will wish to consider whether the process was fair and whether it was adequate.

## 86

is significantly out of pocket. It also seems to be a concern that suspensions were not made as a rule, simply on the basis of the size of the discrepancy identified in the branch.

Turning if we can to the foot of page 2, a table begins and we're going to look at this over the next page. The following table details the 20 audits undertaken in 2004/05 that have revealed losses in excess of $£ 25,000$.

Thank you. And if we look at that and if we just scroll down, we see a list of all of the branches where losses were found in excess of $£ 25,000$. In some cases, specific reasons were given, including "System issues relating to bureau claimed" and in other instances simply "£59,000 declared shortage not made good" or "Cash figure inflated". There doesn't appear, at least in this report, to have been any appetite to get to the bottom of the reason why these losses may have been found.

You will hear further evidence on the approaches taken by the Post Office, both on a general level and in respect of individual audits. You will wish to consider whether they were conducted effectively and fairly and in the knowledge of the fact that Horizon was not infallible.

88

That's all I wish to say at the moment about Phase $3 \quad 1$
of the Inquiry. Can I turn to the Inquiry's remaining phases.

I have spent a great deal of time addressing Phases 2 and 3 of the Inquiry because those are the phases that will be heard over the coming months. The Inquiry has disclosed a great deal of documents and witness statements covering those phases and we will continue to do so.

However, over the course of the next year, you will be hearing evidence relating to Phases 4 to 7 . Phase 4 will address action taken against subpostmasters and others. It will address policy making, audits and investigations, civil and criminal proceedings, knowledge of and responsibilities for failures in investigation, and disclosure.

Phase 5 will address the issues of redress, access
to justice, the Second Sight review and report, the Complaint Review and Mediation Scheme, the conduct of the Group Litigation, and responding to the scandal and compensation schemes.

Phase 6 will address governance, the monitoring of Horizon, contractual arrangements, internal and external audit, technical competence, stakeholder engagement, oversight and whistleblowing.

89
it's not obvious to you from what l've said already,
that this part of my opening is less detailed and more
light touch, as the Inquiry is still very much in the evidence gathering stage.

So litigation and appeals, the Group Litigation.
I turn first to the Group Litigation that led to various judgments of Mr Justice Fraser. Those findings are what the Inquiry uses as the starting point for its own investigations and the bedrock upon which we direct our enquiries.

The catalyst that led to the commencement of the Group Litigation was the formation of the Justice for Subpostmaster Alliance, referred to as the JFSA, who had their first meeting in November 2009. At that first meeting as we heard during the human impact phase, involved some 30 subpostmasters. It grew significantly under the leadership of Alan Bates, who campaigned and who continues to campaign for fair compensation for subpostmasters.

The JFSA was instrumental in the Mediation Scheme that was set up in 2012 that I will mention in a moment. It was the JFSA who managed to secure the services of a law firm, and to obtain funding to bring claims in 2015. Claims were eventually made by 555 individuals, the vast majority of whom were subpostmasters, but some

Phase 7 will address current practice and procedure and the recommendations for the future.

You will hear from a wide range of witnesses from the Post Office, from Fujitsu, from subpostmasters, for the NFSP, from Government, from Second Sight, from investigators, from lawyers, and other senior and legal political figures. You will also hear from Duncan Atkinson, King's Counsel, an expert who has been instructed by the Inquiry to assess the Post Office's investigations and its prosecutions' policies and practices, and to analyse certain cases that you have selected.

In opening these phases today, I will identify, broadly chronologically, some of the key milestones in respect of advice and investigation that cut across Phases 4 to 6 . Each of the events that I will address today played their own part in defining or challenging the approach that was taken by the Post Office and by the Government, including by or on behalf of senior executives and ministers towards subpostmasters, their attitude towards appeals, towards litigation, and towards compensation.

However, first, l'll briefly remind you, sir, of the various strands of litigation and criminal appeals that are the backdrop to these issues. I should say that if 90
of which were crown employees.
These individuals sought to have the claims brought together and managed under a Group Litigation Order, a GLO. As you know, GLO is ordered where there are common issues of fact and law across a large number of claims. In these instances, the Civil Procedure Rules in this country acknowledge that it makes sense for those claims to be managed together and for special arrangements to be made to manage the litigation proportionately, such as the selection of test claims, as opposed to hearing evidence relating to each claim individually and separately.

On 22 March 2017, Senior Master Fontaine made a GLO and the claims proceeded to be managed together with Mr Justice Fraser as the managing judge.

Over the course of the Group Litigation, Mr Justice Fraser produced six judgments in total. Most of these related to procedural issues rather than going to the substance of the claim.

The critical substantive judgments are the third and sixth of the judgments referred to as the "Common Issues Judgment" and the "Horizon Issues Judgment" respectively.

It's helpful to set out, briefly, the key issues that were considered in each of those judgments. In the 92
$\begin{array}{ll}\text { Common Issues Judgment they were: (i) the enforceability } & 1 \\ \text { of some contractual terms in some of the contracts; (ii) } & 2 \\ \text { whether the contract between subpostmasters and the Post } & 3 \\ \text { Office formed a "relational contract" which implied } & 4 \\ \text { a duty of good faith on both parties; and (iii) whether } & 5 \\ \text { the Post Office was entitled to treat shortfalls in } & 6 \\ \text { branch accounts showing on the Horizon System as a debt } & 7 \\ \text { without further investigation. } & 8 \\ \quad \text { It's fair to say that Mr Justice Fraser resolved all } & 9 \\ \text { of these issues in favour of the subpostmasters' } & 10 \\ \text { position, and this was a substantial blow to the Post } & 11 \\ \text { Office's defence. You will be aware that following } & 12 \\ \text { this, during the Horizon Issues trial, an unsuccessful } & 13 \\ \text { application was made to Mr Justice Fraser to recuse } & 14 \\ \text { himself. } & 15 \\ \text { Among Mr Justice Fraser's findings at this stage was } & 16 \\ \text { that the Post Office, in demanding repayment of } & 17 \\ \text { a shortfall shown by Horizon, had misstated the factual } & 18 \\ \text { and legal liability of a subpostmaster to make good any } & 19 \\ \text { losses. He described the Post Office's behaviour as } & 20 \\ \text { "oppressive". } & 21 \\ \text { Turning, then, to the Horizon Issues Judgment, the } & 22 \\ \text { key issues considered as part of this judgment were } & 23 \\ \text { firstly the presence of bugs, errors and defects which } & 24 \\ \text { were in fact present in the Horizon System, and over } & 25\end{array}$ 93
of Horizon accurately to process and to record transactions as alleged by the claimants.

Two. All the evidence in the Horizon Issues trial showed not only was there the potential for this to occur, but that it actually had happened, and on numerous occasions. This applied both to Legacy Horizon and also Horizon Online.

Mr Justice Fraser thirdly accepted the claimants'
submissions that, in terms of likelihood, there was
a significant and material risk on occasion of branch
accounts being affected in the way alleged by the
claimants by bugs, errors and defects.
Fourth, in his judgment, there was a material risk
that such a shortfall in a branch's accounts was caused
by the Horizon System during the years when both Legacy
Horizon and Horizon Online were in use, which is 2000 to
2010, and then 2010 to 2017 respectively.
There was a material risk -- fifthly -- for errors
in data recorded within Horizon to arise in data entry,
in transfer, or in processing of data in Horizon, in
both Legacy Horizon and in Horizon Online.
Importantly, Mr Justice Fraser also found first that
the Post Office had access to the causes of the alleged
shortfalls in branches, including whether they were
caused by errors, bugs or defects in Horizon, albeit
what time. Secondly, whether Legacy Horizon or the first iteration of Horizon Online, was robust. Third, whether Fujitsu were able remotely to access a branch's data and inject or alter the data remotely. Fourth, whether adequate records were kept to substantiate the losses claimed. Fifth, whether adequate investigations took place to identify and remedy errors, bugs and defects.

Mr Justice Fraser's judgment in this regard was again highly critical of the Post Office's conduct. He found that there were numerous bugs, errors and defects in Horizon which were capable of causing, and in fact did cause, shortfalls in Post Office branches. He found that the evidence he had heard established 25 different bugs with the potential to impact upon branch accounts, with evidence of actual lasting impact having occurred as a result of 22 of them.

Horizon itself did not alert subpostmasters to the existence of any such bugs, errors or defects he found. His conclusions included the following: first, it was possible for bugs, errors and defects of the nature alleged by the claimants to have the potential both (a) to cause apparent or alleged discrepancies or shortfalls relating to subpostmasters' branch accounts or transactions, and also (b) to undermine the reliability 94
that they would also rely on Fujitsu to undertake any investigations; and secondly, that Fujitsu had the ability and facility to insert, inject, edit or delete transaction data or data in branch accounts, to implement fixes in Horizon that had the potential to affect transaction data or data in branch accounts, or to rebuild branch transaction data, all without the knowledge or consent of the subpostmaster in question.

If Fujitsu injected a transaction into a branch account this "would look as though the subpostmasters had done it."

That's paragraph 1004 of his judgment.
He concluded that Legacy Horizon was "not remotely robust. The number, extent and type of impact on the numerous bugs, errors and defects that I have found in Legacy Horizon makes this clear."

That's paragraph 975.
HNG-X was slightly more robust, but still had a significant number of bugs, errors and defects, particularly in the period 2010 to 2015.

The litigation was settled shortly after the Horizon Issues Judgment was handed down, and l'll come to speak about that settlement in a moment.

It is worth noting that whilst some of these issues touched upon the conduct of Fujitsu, Fujitsu was not 96
itself a party to the litigation. It is of course
a Core Participant in this Inquiry, and we will be
investigating much more fully the role that Fujitsu
played, including in respect of the evidence that was and was not relied upon in the litigation.

In terms of the settlement, the Group Litigation was
brought to an end by a Deed of Settlement dated 10 December 2019. The Deed of Settlement made clear that none of its terms were to be construed as an admission of liability, and that the terms of the settlement were to be "in full and final settlement" of all of the claims made by the claimants, save for claims brought for malicious prosecution, which was defined in some narrow terms.

By clause 2.1 of the settlement, the Post Office
agreed to make settlement payments which, in aggregate,
amounted to $£ 57.75$ million. Of that sum, $£ 15$ million
was earmarked for the legal costs of the solicitors and barristers who had acted for the claimants in the Group Litigation. $£ 42$ million was paid over "by way of damages, litigation funding, after-the-event costs or other costs or other relief claimed in the action."

However, as has been widely reported, only
$£ 10.5$ million of that $£ 42$ million was shared between the claimants as compensation for the losses which they
relation to legal representation. You stressed the need for progress on the Group Litigation Scheme, and address other aspects of that scheme, such as interim payments, and, finally, your update also addressed the Overturned Historic Convictions Scheme and the need for an independent person or panel to determine claims and resolve disputes. And you have recently announced, sir, as you know, a further hearing on 8 December of this year at which to monitor progress.

As part of Phase 5 of the Inquiry, you will examine the extent to which the Post Office has delivered on its commitments, and the extent to which the schemes provide an adequate means for affected subpostmasters, managers and assistants to obtain financial redress for the wrongs that they have suffered.

Sir, I'm about to turn to the CCRC and the criminal appeals. Might that be an appropriate moment to break for lunch?
SIR WYN WILLIAMS: Of course, yes. We will begin again at 2.00 pm .

MR BEER: Thank you very much, sir. 21
( 12.58 pm )
(The Short Adjournment)
( 2.00 pm )
SIR WYN WILLIAMS: Thank you.

97
claimed in the litigation. A very substantial proportion of the settlement payment was swallowed up in litigation funding and other costs.

Most, if not all, of the claimants received a sum by way of compensation that was substantially less than the alleged losses which they had claimed in the Group Litigation.

You, sir, have already begun your investigation into the various compensation schemes that have been put in place since then, namely: the Historical Shortfall Scheme; secondly, a scheme referred to as the Overturned Historic Convictions Scheme, which was established to provide interim and final payments for subpostmasters convicted on the basis of evidence generated by Horizon, and whose convictions have been quashed; and, thirdly, a scheme called the Group Litigation Scheme, which is under development to provide further compensation for all the claimants in the Group Litigation who are not eligible for compensation under the overturned historic convictions scheme.

You have expressed concerns about the progress that's being made in this respect, and on 15 August issued a progress update which addressed delays in determining certain aspects of the HSS and the amendments that should be made to it, including in 98

MR BEER: I was turning to the CCRC and criminal appeals. The CCRC is a statutory body with the power to refer criminal cases to the Court of Appeal Criminal Division, where it considers that there is a real possibility that a conviction may be overturned. In March 2021 the Court of Appeal considered 42 convictions that had been so referred, following the judgments by Mr Justice Fraser.

As you know, there were two grounds of abuse of process that were pursued before the Court of Appeal as grounds of appeal: first, that the defendants could not have a fair trial; and, secondly, that his or her trial was an affront to the conscience of the court.

The Court of Appeal, having considered the judgments of Mr Justice Fraser and the individual circumstances of the cases before the court, held that the failures in investigation and disclosure were such as to mean that a fair trial was not possible in any of the cases where Horizon data had been essential to the prosecution. That constituted all but three of the appeals before it.

Moreover the court found that:
"The failures of investigation and disclosure were ... so egregious as to make the prosecution of any of those cases an affront to the conscience of the court."

So in all but three cases the appellants' convictions were quashed. Further appeals have

100
consequently taken place in respect of more subpostmasters and others who were convicted, and further convictions have been quashed and continue to be quashed.

With that criminal and civil litigation in mind the key milestones in advice and investigations that I will address over the remainder of today, although no doubt there will be others in due course, are as follows: firstly, the Helen Rose Report, a 2013 report by the Post Office's security fraud analyst, which touched on Horizon integrity issues.

Secondly, the Second Sight Interim Report, a 2013
report by forensic accountants, which, on an initial
review, did not identify systemic issues with Horizon,
but which identified bugs and was critical of the Post
Office's handling of its investigation.
Thirdly, the Clarke Advices, namely advice from
Simon Clarke, a barrister at the Post Office's
solicitors, Cartwright King, again in 2013. A first
significant advice addressed to the reliance on Gareth
Jenkins as an expert witness in Post Office prosecutions
will be considered and a second advice concerning the
need to record and retain information.
Fourth, the Second Sight Report itself, which was
finally completed on 9 April 2015, and which, amongst 101
article, she referred to problems with Horizon. In the same year, two Members of Parliament reported their constituents' concerns about Horizon to the Minister of Postal Affairs, who in turn forwarded their letters to the managing director of the Post Office.

You, sir, will wish to investigate those early reports and examine the response to them.

As I have already discussed in relation to Phase 3, this will include the August 2010 report by Mr Ismay entitled "Horizon -- Response to the Challenges Regarding Systems Integrity".

The Inquiry will investigate why little appears to have been done in the intervening period before the reports, the eight reports, and advices which I now turn to address.

First, the Helen Rose Report. On 12 June 2013, Helen Rose wrote a report in respect of Horizon Issues at the Lepton Branch. We needn't turn it up but that's POL00030214. Helen Rose was a Post Office security fraud analyst who was looking into a transaction correction at the branch because the postmaster had denied reversing a transaction for $£ 76.09$ and who had involved a forensic accountant as he believed his reputation was in doubt.

The report included the contents of a series of 103
other things, was critical of the access that was provided by the Post Office to documents that were considered necessary for the purposes of that investigation.

Fifth, various advices from Brian Altman King's Counsel in the period 2013 to 2015, which addressed the review being carried out by Cartwright King, which addressed advice in relation to mediation, advice on the Post Office's prosecution role and advice on the charging of theft and false accounting.

Sixth, advice from Jonathan Swift, now Sir Jonathan Swift, and Christopher Knight in 2016, that formed a review on behalf of the then chairman of Post Office, Tim Parker, concerning the steps taken in response to complaints by subpostmasters.

Seventh, various advice given by Mr Altman in the period from 2016 onwards, which followed the Swift review, addressing Post Office's criminal prosecutions and advice on the judgments of Mr Justice Fraser and their implications for the safety of convictions.

Then eighth, advice from various legal professionals in respect of the Group Litigation.

Of course, the story of wide scale and executive level knowledge can be traced further back than these reports. In 2009, in Rebecca Thomson's Computer Weekly 102
emails between Ms Rose and Gareth Jenkins, whom I've already mentioned and we will come to again shortly, because, in addition to having significant input into the Horizon system as an employee of Fujitsu, he was also an expert witness used in the Post Office's prosecutions of subpostmasters.

During the course of her investigation, on the 30 January 2013, Gareth Jenkins had stated in an email to Ms Rose that "It isn't clear what failed" in respect of the Lepton Branch, and an email from Ms Rose on 13 February 2013 included the following important sentence:
"I know you are aware of all the Horizon integrity issues."

Whilst Ms Rose concluded that the system in that case had behaved as it should, she expressed concerns that:
"We cannot clearly see what has happened on the data available to us and this in itself may be misinterpreted when giving evidence and using the same data for prosecutions."

The recommendation was change the logs so that "system created reversals are clearly identifiable".

As I will come to explain, the content of those underlying emails and Ms Rose's report was later seen to 104
be significant by Simon Clarke, the barrister at Cartwright King solicitors, who was concerned about the conduct of the Post Office's prosecutions.
Second, then, the interim report of Second Sight.
In May 2012, following intervention by James Arbuthnot, now Lord Arbuthnot, the Post Office agreed to engaged a firm of forensic accountants to review Horizon. Following discussions involving the Post Office's senior manager, Lord Arbuthnot and Alan Bates and Kay Linnell of JFSA, Second Sight Support Services Limited, which I'm going to call "Second Sight", were appointed to carry out the review. The investigators were lan Henderson and Ron Warmington.
It's worth noting at this stage, for reasons that will become clear in due course, that a paper was issued by the agreement of the Post Office and the JFSA called "Raising Concerns with Horizon", which sought to reassure subpostmasters. That's POL00000218. It was signed by the Post Office on 17 December and included the following paragraph:
"In order to carry out the Inquiry, Second Sight
will be entitled to request information related to a concern from Post Office Limited and if Post Office Limited holds that information, Post Office Limited will provide it to Second Sight."
produced in July 2013, it was observed that "whilst in no way minimising the potential importance of the cases under review, this level of response suggests that the vast majority of subpostmasters and branches are at least reasonably happy with the Horizon System".

That observation was repeated by the Post Office and others in the years that followed and the Inquiry will investigate why so few individual subpostmasters came forwards at that time.

Second Sight conducted what were called Spot
Reviews. That is because the investigators considered that it would not be it efficient or cost effective to examine all of the issues raised by subpostmasters or covered in the Post Office case files. Instead the investigators will conduct a "fast track" review of the information available in order to identify the key issues that were relevant to the remit of the investigation.

Each issue was then dealt with as a Spot Review. A case with multiple issues would give rise to multiple Spot Reviews, each of which would be dealt with on an individual basis.

The reports issued by Second Sight were issued in a way that maintained the anonymity of each individual subpostmaster.

The remit of the investigation was defined in Second Sight's Interim Report, which is POL00029650, as follows:
"... to consider and to advise on whether there are any systemic issues and/or concerns with the Horizon System, including training and support processes, giving evidence, and reasons for the conclusions reached."

It was agreed that Second Sight's report would:
"... report on the remit and if necessary will contain recommendations and/or alternative recommendations to Post Office Limited relating to the issues and concerns investigated during the Inquiry. The report and recommendations are to be the expert and reasoned opinion of Second Sight in the light of the evidence seen during the Inquiry."

Second Sight had been asked to investigate 47 individual cases that had been submitted to either the JFSA or to the office of Lord Arbuthnot and which had been highly critical of the Horizon System and, in many cases, the way that the Post Office had dealt with the matters reported.

After notifying the wider Post Office Network about the proposed investigation, an additional 14 cases were accepted for investigation.

At the outset of Second Sight's report, which was 106

Second Sight noted early on in the interim report that the Post Office's responses to the Spot Reviews were long and highly technical documents which in some cases presented counter assertions based on the standard operating procedures and controls, rather than "tangible evidence" of what had actually happened.

The interim report addressed four spot reviews. In respect of whether defects in Horizon caused some of the losses for which subpostmasters and their staff were blamed, Second Sight said there was still much work to be done to investigate, but they were able to conclude that, in one of the four cases, "although the Horizon System operated as designed, the lack of timely, accurate and complete information presented to the subpostmaster was a significant factor in his failing to follow the correct procedure".

That's POL00029650, at page 5.
In another, the Post Office made changes to the relevant standard operating procedures just a few days after the subpostmaster was suspended and Second Sight noted that it is possible that if that change in procedures had been implemented earlier, many of the problems would not have occurred.

During the course of their investigation, the Post Office had disclosed to Second Sight the existence of

108
"defects" in Horizon that had impacted some 76 branches. This included, firstly, the receipts and payments mismatch problem, that was said by the Post Office to have impacted 62 branches; secondly, the local suspense account problem, which was said by the Post Office to have affected 14 branches; and, thirdly, one other single bug in the Horizon software.
The report from Second Sight detailed a wide range of frequently reported issues. Their conclusion in this regard was pointed, stating -- and this is the same reference, page 7 at paragraph 7.3:
"We can't help concluding that had POL investigated more of the 'mysterious shortages' and problems reported to it, with the thoroughness that it has investigated those reported to it by Second Sight, POL would have been in a much better position to resolve the matters raised, and would also have benefited from process improvements."
The authors noted that the investigation division in the Post Office was not contractually required to enquire into matters where crime was not suspected. They noted other issues, such as complaints by subpostmasters that they were only provided with a full copy of their contract with the Post Office when the Post Office commenced litigation against them or 109
an appropriate level with the Post Office.
Fifth, the lack of an effective outreach
investigations function with the Post Office resulted in
the Post Office failing to identify the root cause of problems and missing opportunities for process improvements.

Sixth, the end of the trading period processes could be problematic for individual subpostmasters, particularly if they were dealing with unresolved transaction corrections. The lack of a suspense account option meant it was difficult for disputed transaction corrections to be dealt with in a neutral manner.

On the day that the interim report was published, the Post Office announced the creation of a Mediation Scheme. Its press notice, having quoted from the then chief executive Paula Vennells, announced as follows, this is CWU00000002:
"... the creation of a working party to work collaboratively to complete the review of cases started by Second Sight last year. This would examine the themes identified by Second Sight and consider all cases brought forward by the JFSA and MPs, together with any new themes which emerge from these cases."

On 26 August 2013 the Post Office made a further announcement and created the initial Complaint Review 111
recovery action against them.
The Interim Report's conclusions were preliminary only, acknowledging that there was still much work to be done. Nevertheless, the conclusions were as follows -same reference page 8:

First, Second Sight had so far found no evidence of system-wide, systemic, problems with the Horizon software.

Second, they were aware of two incidents where defects or bugs in the Horizon software gave rise to 76 branches being affected by incorrect balances or transactions, which took some time to identify and to correct.

Third, occasionally an unusual combination of events, such as a power or communications failure during the processing of a transaction could give rise to a situation where timely, accurate and complete information about the status of a transaction was not immediately available to a subpostmaster.

Fourth, when individual subpostmasters experienced or reported problems, the Post Office's response could appear unhelpful, unsympathetic or simply fail to solve the underlying problem. The lack of a user forum or similar facility meant that the subpostmasters had little opportunity to raise issues of concern at 110
and Mediation Scheme, the objective of which was to "address the concerns raised by some subpostmasters regarding cases which they feel require further resolution".

A working group, comprising the Post Office, JFSA and Second Sight was established to develop and monitor the scheme and Sir Anthony Hooper, a former Court of Appeal judge, was appointed as the independent chair.

The scheme received 150 applications before the deadline for applications expired on 18 November 2013.

There are a number of aspects of the interim report that will become important parts of your investigation. One of these is the interim finding by Second Sight that they had so far found no evidence of system-wide, systemic problems with the Horizon software. The Inquiry will examine to what extent that finding was used or misused by the Post Office and others to support or justify their actions against subpostmasters and then in litigation.

Can I turn to the Clarke Advices.
By July 2013, the Helen Rose Report and the Second Sight Interim Report had been completed and it became clear that there were issues with the disclosure that had been given in criminal prosecutions. Simon Clarke, a barrister at Cartwright King Solicitors, 112
became concerned about the conduct of the prosecutions.
On 8 July 2013, Mr Clarke advised on the need to conduct
a review of all Post Office prosecutions so as to
identify those who ought to have had the certain
material concerning problems with Horizon disclosed to
them, as well as a review of current cases where there
had been no disclosure when there ought to have been.
He indicated that the existence of bugs needed to be disclosed to defendants, where the test for the disclosure was met, and he set out the scope of the exercise to be conducted.

That exercise has been referred to as the CK -referring to Cartwright King -- the CK Sift Review and that reviewed all cases conducted since 1 January 2010.

The Inquiry will, in due course, ask to what extent
this exercise was truly independent and whether it was sufficient in its oversight.

On 15 July 2013, Mr Clarke wrote an advice on the continuing use of Gareth Jenkins as a prosecution witness. The advice was entitled:
"Advice on the use of expert evidence relating to the integrity of the Fujitsu Services Limited Horizon system."

I wonder whether we could turn that up.
POL00006798, thank you.

I'll introduce it in summary first.
Mr Clarke explained in the advice that the Royal Mail Group and Post Office had relied on Mr Jenkins or "Dr Jenkins" or "Dr Jennings", as he is referred to by Mr Clarke, for many years, and had provided many expert statements in support of prosecutions, that it had negotiated with and arrived at joint conclusions and joint reports with defence experts and that he had attended court to give evidence on oath at criminal trials. Five recent examples were selected by Mr Clarke.

Mr Clarke identified that the Helen Rose Report and the Second Sight Interim Report had both raised concerns concerning bugs. He then referred to a conversation on 27 June between the Post Office and Cartwright King, which identified that some within the Post Office had been aware of bugs affecting up to 30 offices. On 28 June 2013, Mr Jenkins confirmed that he had told Second Sight about two bugs during the course of their investigation. That's the receipts and payments mismatch and the local suspense account bugs.

Mr Clarke highlighted that expert statements had been provided by Gareth Jenkins in criminal proceedings, all attesting to the robustness and integrity of Horizon and expressed in terms and were phrased in such a way 114
him but which undermines his expert opinion. This failure is in plain breach of his duty as an expert witness.
"[2] Accordingly, Dr Jenkins' credibility as an expert witness is fatally undermined; he should not be asked to provide expert evidence in any current or future prosecution.
"[3] Similarly, in those current and ongoing cases where Dr Jenkins has provided an expert witness statement, he should not be called upon to give that evidence. Rather, we should seek a different, independent expert to fulfil that role.
"[4] Notwithstanding that the failure is that of Dr Jennings and, arguably, of Fujitsu Services Limited, being his employer, this failure has a profound effect on [Post Office Limited] and [Post Office Limited] prosecutions, not least because by reason of Dr Jenkins' failure, material which should have been disclosed to defendants was not disclosed, thereby placing [Post Office Limited] in breach of their duty as a prosecutor."

## Next:

"By reason of that failure to disclose, there are a number of now convicted defendants to whom the existence of bugs should have been disclosed but was 116
not. Those defendants remain entitled to have ..... 1
disclosure of that material notwithstanding their now ..... 2
convicted status." ..... 3
He then turns in brackets to the review.
Next:
"Further, there are also a number of current cases
where there has been no disclosure where there ought tohave been. Here we must disclose the existence of thebugs to those defendants where the test for disclosureis met."
Lastly:"In an appropriate case the Court of Appeal willconsider whether or not any conviction is unsafe. Indoing so they may well inquire into the reasons forDr Jenkins' failure to refer to the existence of bugs inhis expert witness statement and evidence."End of quotes.That advice was given to the Post Office inJuly 2013, eight years before the Hamilton appeals. Itwas not disclosed until November 2020. The Inquiry willseek to establish why the issues raised in the adviceand the advice itself, which was so important to theCourt of Appeal's subsequent findings, were notdisclosed earlier by the Post Office.Meetings had been taking place between the Post
conference call, which I understand to have taken place on the morning of Wednesday 31st July, it became unclear as to whether and to what extent material was either being retained centrally or disseminated. The following information has been relayed to me:
"i. The minutes of a previous conference call had been typed and emailed to a number of persons. An instruction was then given that those emails and minutes should be, and have been, destroyed: the word 'shredded' was conveyed to me.
"ii. Handwritten minutes were not to be typed and were to be forwarded to POL's Head of Security.
"iii. Advice had been given to POL which I report as relayed to me verbatim [then in italics]:
"'If it's not minuted it's not in the public domain and therefore not disclosable.
"'If it's produced it's available for disclosure -if not minuted then technically it's not.'
"iv. Some at POL do not wish to minute the weekly conference calls."

That information was clearly of concern to Mr Clarke and so he wrote the shedding advice.

That advice contained trenchant criticisms. He made it clear that there was a duty to record and to retrain material but could not be abrogated. He explained that 119

Office and Cartwright King in July of that year, 2013, to consider issues relating to Horizon and the prosecution of offences. Mr Clarke had advised that there ought to be a single central hub to act as the primary repository for all Horizon-related issues. Participants were apparently informed that they should bring all Horizon-related issues that they had encountered into that meeting. Minutes were to be taken at the meeting. They were to be centrally retained and disseminated to those who required the information.

At some point between the conclusion of a conference call on 31 July 2013 and a subsequent advice that he wrote, it became unclear to Mr Clarke as to whether and to what extent material was either being retained or centrally disseminated in accordance with those instructions.

Information was relayed to Mr Clarke, and we can see that in his subsequent advice. Can we look at POL00006799. This is a separate advice called the duty to record and retain material, sometimes referred to as the shredding advice.

Can we turn over the page, please, and look at paragraph 5 . He refers to the conference call to which I've referred, and says:
"At some point following the conclusion of the third 118
to do so would amount to a breach of the law and, in the case of solicitors and counsel, serious breaches of their respective codes of conduct. Mr Clarke advised that where such a decision was taken, partly or wholly in order to avoid future disclosure obligations, it may well amount to the crime of conspiracy to pervert the course of justice.

Further, that if contrary advice was given, his own advice would itself become disclosable.

Mr Clarke set out in strong terms that the only proper way forward was for the conference calls to be minuted properly, these minutes to be centrally retained and made available to all those who properly required access to them.

Further, he emphasised that individual investigators with knowledge were bound by both a duty to record and to retain information and to inform the prosecutor, the Post Office, about it. He emphasised the need for a mechanism to permit the collation of all Horizon related bugs, defects, complaints, queries and Fujitsu remedies arising from all sources into one location.

His conclusion was that any advice to the effect that, if material is not minuted or otherwise written down it doesn't fall to be disclosed, was wrong, and represented a failing fully to appreciate the duties of 120
fairness and integrity placed upon a prosecutor's 1 shoulders.

The Inquiry will seek to establish what it was that the Post Office had destroyed and look into whether there was a culture of not recording information, of document destruction and of withholding important information from disclosure. It will also, of course, look into who was aware of Mr Clarke's advice, or the effect of it, or any of its contents, and what they did with that knowledge and what subsequent action was taken on the basis of it.

That can come down from the screen.
Can I return to the Detica report.
Meanwhile, Detica, a subsidiary of BAE Systems, had
been carrying out an investigation and on 1 October 2013
published a report called "Fraud and Non-conformance in
the Post Office; challenges and Recommendations".
That's POL00029677.
This followed a pilot which looked at the data that
was available to security teams relating to branch
activities and transactions and the quality of information and processes shared by the central teams.
It also conducted a detailed data analysis of branch behaviour. The report had been commissioned by the Post Office's head of security, John Scott, and its legal and 121
a failure of governance.
Can I turn to the Second Sight Report. By the summer of 2014, on 25 July, Second Sight issued what was entitled "Briefing Report -- Part One". That dealt with, first, the general information about the Post Office, its branches and the role of subpostmasters; a description of the training and support functions as well as the Post Office audit and investigation processes; an overview of the Horizon System and associated equipment; an introduction to the application of double entry accounting in Horizon; a description of significant branch operating and reporting procedures and the associated processing of transactions; an outline of the treatment of losses and surpluses; an analysis of typical errors.

Second Sight then issued a first version of their "Part Two" report on 21 August 2014, which recognised that a number of issues were still under investigation. The Post Office provided a response to it on 22 September 2014.

The Inquiry will hear about some important events which occurred shortly before the final report was published. Before I address the substance of the final report, it's necessary to detail some of those events as they provide an important context.
compliance director, Susan Crichton.
The Detica report was acknowledged to have taken place against the backdrop of wide-ranging changes within the Post Office, which included public discontent amongst subpostmasters relating to the Horizon System and the review of Horizon by Second Sight. The report identified a number of shortcomings that were said to pose serious risks to the financial performance of the business.

This included, amongst other things, findings that "Post Office systems are not fit for purpose in a modern retail and financial environment", expressing a concern about the difficulty in recording information from multiple transaction systems. The cross-reference to that is POL00029677, page 37, at paragraph 7.2.2.

It also criticised the investigations process, stating there needed to be "a concept of quality, control and rigour in the investigation process", same reference page 41, paragraph 7.4.1.3.

Pausing there, all of the events that I have so far addressed occurred in 2013. As part of Phase 6 of the Inquiry, we will be looking at what was going on at executive level and at board level in that period, and in the period that followed, to address the problems that were being raised and the extent to which there was 122

By December 2014, Radio 4's Today Programme had a segment on Horizon. The programme first heard from Jo Hamilton who explained what had happened to her, and that she would love to see all of the subpostmasters' names cleared and would love to see them have some of their money back.

Next came Lord Arbuthnot, who spoke powerfully about the problems that the Mediation Scheme was facing. He said that the Post Office were trying to "sabotage that very mediation scheme that they set up and they're doing it in secret".

A significant part of his complaint was that, in his view, Second Sight had shown their independence and Post Office were trying to overcome their recommendations. He said that he had "lost faith in Post Office's determination to see it through to a proper end".

In response, Mark Davies, the communications director for the Post Office, emphasised what he said was a small number of people who said they'd had problems with Horizon and -- a phrase which I'll be coming back to -- the review had "found no evidence at all of any systemic problems with the Horizon System".

In words that would attract some further notoriety, Mr Davies said that he was sorry if people have "faced lifestyle difficulties, lifestyle problems as a result

124
of their having been working in Post Office branches".
As part of this Inquiry, the strategies adopted by
the Post Office in response to this emerging scandal and
who was responsible for the formulation of those
strategies and the development of them, will be investigated.
The Today Programme interview was followed shortly thereafter by a meeting of the Business Innovation and
Skills Select Committee on 3 February 2015. In that committee, Ian Henderson of Second Sight told MPs that the Post Office was obstructing the work of Second
Sight. This was denied by the then CEO of the Post Office, Paula Vennells.
It was also at this committee meeting that the
General Secretary of the National Federation of subpostmasters, George Thompson, said, amongst other things, that the NFSP "represents 7,000 subpostmasters ... if there was a systemic problem ... we would be absolutely inundated" and, a little later "Over the 15 years, the Horizon System has been fantastically robust".
On 10 March 2015, it was announced that the working group was to be wound up. According to Second Sight, this was the day before they were due to circulate a draft of the report to all members of the working 125
relating to a small number of Post Office employees
working at the Bracknell office of Fujitsu in 2008; and,
third, detailed transactional records relating to the
items held in Post Office's suspense accounts and to
disputed transactions in a number of third-party client accounts held by Post Office.

In respect of the legal files, Second Sight
explained that they could not properly test the Post
Office's assertion that there was "no reason to conclude that any original prosecution was unsafe".

They were told that reviewing individual investigative and prosecution files didn't fall within their terms of reference.

We now know, of course, that the assertion that there was no reason to conclude that any original prosecution was unsafe -- something that Second Sight wanted to investigate further -- was fundamentally wrong.

In respect of access to the emails, Second Sight explained that the Post Office had stated that it wasn't possible for unauthorised remote access to transaction data to have occurred at the Fujitsu office in Bracknell and that it needed further evidence properly to research this.

Again, we now know that Post Office's assertion 127
group and the same day that Second Sight were notified that their contract was being terminated by the Post Office.

Your Inquiry will be looking at what factors led to the failure of the Complaints Review and Mediation Scheme.

Returning to the Second Sight Report, an updated version of the "Part Two" report was finally completed on 9 April 2015. That's POL00029849.

The "Part Two" report was highly critical of the Post Office's conduct in respect of providing access to information. You'll recall that when I addressed the Interim Report, I highlighted that a document called "Raising Concerns with Horizon" had sought to reassure subpostmasters confirming that Second Sight would have access to all of the documents that it needed.

However, the investigators explained at the outset -- that's paragraph 2.1 -- that they had experienced significant difficulty in obtaining access to a number of documents that they considered to be necessary for the purposes of their investigation. They fell into the three categories: first, the complete legal files relating to investigations and criminal prosecutions commenced by Post Office that related to the applicants; second, the complete email records
regarding remote access -- again, something that Second Sight wanted to investigate -- was wrong.

In respect of transaction data, Second Sight highlighted that the Post Office had client accounts with business partners such as the Royal Mail, Bank of Ireland, HMRC, DWP, DVLA and others, where significant unreconciled balances existed centrally, which may represent transactions from individual branches that should have been credited back to individual branch accounts. They were unable to investigate this without the relevant information being provided to them by the Post Office.

Can we turn up Second Sight's conclusions in respect of access to information. They're at POL00029849, and can we turn to page 49 of that document, please.

Over the page, please, and go down to the bottom under "Conclusions", at paragraph 26.1. Their conclusions, 26.1:
"When we started our work on these important matters in July 2012, we believed there was a shared commitment with Post Office to 'seek the truth' irrespective of the consequences. This was reflected in us being provided with unrestricted access to highly confidential and sensitive documents, including legal advice relating to individual cases. This position was recognised and well

128
received by other stakeholders, including the [Right Honourable] James Arbuthnot MP and the JFSA.
"26.2. However, as time progressed, and particularly in the last 18 months, it has been increasingly difficult to progress our investigations due to various legal challenges by Post Office. There have been considerable delays in receiving responses to requests for information and legal issues have been raised, such as Data Protection and Legal Privilege, as being the reason various documents could no longer be provided to us."

Over the page, please:
"26.3. We found that types of document previously
provided to us without restriction, were no longer being
provided. Some of these documents were also not being
provided to Post Office's in-house team of investigators.
"We can only conclude that this represented a policy decision by Post Office at a senior level, possibly based on legal advice. We consider this regrettable, particularly in the light of assurances previously provided to ourselves, MPs and the JFSA."

In the light of those damning remarks, the "Part
Two" report stated that the limitation in the scope had significantly restricted Second Sight's ability to 129
subpostmasters, in respect of how to deal with
discrepancies. They identified issues with the helpline, noting that a frequently recurring response by the helpline was, in response to shortfalls, "don't worry about it, it will all sort itself out" and found that, in many instances, the bigger shortages seemed to have arisen as a result of "errors made while trying to correct earlier errors".

The report was critical of the audit trail available to subpostmasters, the conduct of Post Office investigators and the conduct of prosecutions.

It is perhaps not a coincidence that many of these themes were also repeated in evidence that you heard during the human impact hearings, when you heard from subpostmasters who made very similar complaints. As your Inquiry proceeds to these later phases, you will have to consider whether these issues were taken seriously by the Post Office at the time.

One significant issue that was raised by Second Sight, that I have already touched on, was that applicants reported that Horizon transactions appeared to have been entered or stock balances changed, when the branch was closed, and no one had access to any of the Horizon terminals. Second Sight noted that the Post Office had stated that it had not been and never had 131
complete its investigation.
There were other significant disputes between the Post Office and Second Sight, as to the remit of their investigation, including, first, Second Sight's concerns regarding the contract between the Post Office and subpostmasters, which they considered placed subpostmasters in a difficult position, forcing them to make good losses with inadequate information.

Secondly, the transfer of risk between Post Office and subpostmasters, with changes to business processes, such as the introduction of new products and services, adding to the risks.

Thirdly, a lack of improvement in what was called the "error repellency" of Post Office's business systems, which meant that measures to address errors with Horizon, which could have avoided and mitigated problems, were not being introduced.

Despite acknowledging the limitations of its investigations, which resulted from this difference of opinion as to remit and scope, Second Sight nevertheless identified a number of what they called commonly raised issues. These included commonly raised issues, for example, with ATMs, foreign currency transactions and National Lottery syncing.

Second Sight also identified issues with training 130
been possible for anyone to access branch data and to amend live transactional, cash or stock data, without the knowledge of subpostmasters or their staff.

As I have mentioned, one applicant had given evidence relating to a facility at the Bracknell office of Fujitsu, where he alleged that it was demonstrated to him that it was possible to alter Horizon transaction details without the knowledge of subpostmasters. The Post Office was said to have denied that it is possible to "amend branch data remotely". Second Sight identified several apparent inconsistencies in this account but noted the restrictions in their ability to investigate it further.

They concluded that their "current, evidence based opinion, is that Fujitsu/Post Office did have, and may still have, the ability to directly alter branch records without the knowledge of the relevant subpostmaster". That's the same reference at page 6. So it is that in previous 2015, where Second Sight identified remote access as a significant issue.

I have already referred to evidence that in 2010, certain Post Office employees were aware that Fujitsu had remote access. We know from contemporaneous emails that there was a great deal of discussion about this at a senior level in the Post Office in early 2015.

132

Cross-reference to that is POL00024091.
However, remote access was a matter that appears to have been denied by the Post Office, right up until partway through the Group Litigation. The Inquiry will ask how it was that it took so long to admit it.

A section of the report addressing "error and fraud repellency and Horizon's fitness for purpose" was also highly critical of the Post Office. The author said that in not fully investigating errors made at the counter, even where it was obvious that some of those errors have been systematically repeated in a branch or even across a network, the Post Office "seems not to have taken ownership of finding ways to reduce or manage those errors".

On fitness for purpose, Second Sight's report identifies two different approaches. I wonder whether we could draw up the conclusions at the previous reference, POL00029849, this time at page 43 and it's paragraph 21.21 -- so you need to go down a little bit, thank you.
"Is Horizon fit for purpose?
"In trying to answer this question we recognise that, in the vast majority of cases, Post Office's Subpostmasters operate their branches year after year with minimal reported problems. For them, [Horizon] 133
telecommunications failures and the system's resultant restart and recover procedures, it was at that moment that an otherwise repairable situation had often turned into a catastrophe. For them, and in those specific and limited circumstances, Horizon could not be described as 'fit for purpose'."

As to whether there were systemic issues, Second Sight said "when looking at the totality of the 'Horizon experience' we remain concerned that, in some circumstances, Horizon can be systemically flawed from a user's perspective and Post Office has not necessarily provided an appropriate level of support."

Whether or not the Second Sight Report can be described as finding systemic issues is a matter of significant debate. I have already highlighted the comments of the Post Office and the NFSP to the media and to Parliament, prior to the publication of the Second Sight Report. On 29 June 2015, the Parliamentary Under-Secretary of State for Business, Innovation and Skills, George Freeman, said during a Parliamentary debate:
"Second Sight produced two independent reports -one in 2013 and the other earlier this year -- both of which found that there was no evidence of systemic flaws in the system. That is an important point that I would 135
appears (subject to our observation in paragraph 4.6 above) to be 'fit for purpose'.
"References here to 'the Horizon System' are mainly focused on 'Horizon On Line' which evolved from the original Horizon application and was deployed in 2010. Our comments encompass not only the system itself but also supporting provides and procedures. However, some comments received relate to earlier versions of the system, a number of enhancements having been made following user experience and feedback.
"For the system to be considered fully 'fit for purpose' for all users, it would, in our opinion, need to accurately record and process, with a high degree of error repellency, the full range of products and services offered by the Post Office, whilst providing a clear transactional audit trail allowing easy investigation of any problems and errors that arise. The cases that we have reviewed demonstrate that this design objective has not always been achieved."

If we can go forward to paragraph 21.27, please, thank you.
"Where such a person, who was either unsuitable, inexperienced or inadequately trained [they're talking about some subpostmasters there], was faced with problems, perhaps associated with hardware or 134
like to reiterate in response to the shadow Minister's point: there is no evidence of systemic flaws in the system."

That's POL00030475 at page 6.
The role of Government and, in particular, what is now the Department for Business, Energy and Industrial Strategy, in responding to the emerging scandal, will therefore form a significant part of your Inquiry. Your Inquiry will also look into the breakdown in cooperation between the Post Office, Second Sight and others, it will investigate the levels of knowledge of such issues, such as remote access and systemic problems and will identify any failures in this regard.

After the break, sir, could I turn to the role of external lawyers and legal advice, again broadly chronologically, starting with advice from Mr Altman, King's Counsel, in 2013 and 2014.
SIR WYN WILLIAMS: Of course. What time shall we be starting up again?
MR BEER: Using earlier as a precedent, sir, 3.15.
SIR WYN WILLIAMS: All right, fine.
( 2.59 pm )

|  | (A short break) |
| :--- | ---: |
| ( 3.15 pm ) |  |
| MR BEER: | Thank you very much, sir. |

136
I was turning to advice from Brian Altman King's Counsel, in 2013 and 2014. Mr Altman had advised the Post Office over a considerable period of time, including representing the Post Office in the Court of Appeal in criminal appeals. He was formerly the most senior prosecution barrister in England, known as the First Senior Treasury Counsel. For the purposes of opening, I will begin on 2 August 2013, that's after the Helen Rose Report, the Interim Report of Second Sight and the Clarke Advice.
On 2 August 2013, Mr Altman provided advice on Cartwright King's current processes in a document entitled "Interim Review of Cartwright King's current processes". No need to display it but it's POL00006801. He advised that the approach that was being taken by Cartwright King and counsel appeared to be "fundamentally sound", but suggested that the Post Office may wish to consider the geographical limit of the review, which was limited to Cartwright King cases, and English Cartwright King cases, and the temporal limit that had been applied. This had been limited to a period of only three years.
He also advised that they should consider the extent to which non-disclosure by Gareth Jenkins was the only issue potentially forming any grounds of appeal or 137
mediation. I wonder whether we could look at POL00006769. This is a note of a consultation with Mr Altman on the 9 September 2013, and I just want to look at one part of it, it's on page 3 of the document. It's the fourth paragraph from the top, starting "BA advised", "BA" meaning Mr Altman.

So the fourth paragraph in:
"[Mr Altman] advised considerable caution in relation to mediation cases involving previously convicted individuals (Seema Misra has already indicated an intention to be within the scheme). The concern is that lawyers acting for those individuals may be using the scheme to obtain information which they would not normally be entitled to in order to pursue an appeal."

The Inquiry will be looking at how the advice that was being given in relation to the approach to mediation and the subsequent Group Litigation, influenced or was influenced by advice that was given in relation to the criminal appeals. We know that Seema Misra's appeal was quashed on the grounds that her prosecution was both unfair and an affront to justice. But that didn't occur until 23 April 2021, some eight years later.

The Court of Appeal identified significant failings in her prosecution, including a failure to grant a defence request for Horizon data and wrongly placing
whether the review should be broader.
Mr Altman raised the issue of a possible conflict with Cartwright King, essentially marking their own homework. But Mr Altman's advice in this respect, was "there is benefit in Cartwright King and its internal counsel identifying and engaging in the review of impacted cases, as they are familiar with their case files and intimate with the process".

He went on to say:
"But it seems to me it will be wise for me to dip sample some of their work in due course, and I may have to devise some criteria of my own for those cases I feel I should review personally."

He gave some other practical advice to Cartwright King in respect of the review that they were conducting.

It may become relevant that, as part of the advice, that Mr Altman considered two copy prosecution files, something that does not appear later to have been reflected in a submission to the Court of Appeal in Hamilton, namely that this advice considered a review of the process, though not the individual decisions in reviewed cases.

Now, Mr Altman's advice during this period was not confined to matters relating to the criminal appeals and instead it touched on other matters, including the 138
of an article relating to the integrity of the system in a schedule of sensitive material. A question that will be asked is that: should she and others in a similar position have been provided with more information and earlier? If so, why wasn't she? What role did legal advice of this kind provide about exercising considerable caution in relation to mediation cases?

On 15 October 2013, Mr Altman provided his "General Review". That's POL00006803. He again advised that the Cartwright King review was fundamentally sound and that he had not detected any systemic or fundamental flaws in the review process or the evidence arising from it, albeit that that should be kept under review. One important aspect of this advice concerned the role of Gareth Jenkins, with Mr Altman agreeing that Mr Jenkins was "tainted and his position as an expert witness is untenable".

We know from the Horizon Issues judgment that Gareth Jenkins contributed to the evidence that was relied on in the Group Litigation, albeit the Post Office chose not to call him as a witness and thereby subject him to cross-examination.

The Inquiry will ask whether it was appropriate in the light of the advice received from both Mr Clarke and Mr Altman, to behave in this way, to approach the

140
litigation in this way.
By late 2013 Mr Altman was also advising the Post Office on their investigative or prosecutorial roles. On 19 December he provided written advice entitled "Review of Post Office Limited Prosecution Role", that's POL00006802. An earlier draft of this advice had been circulated by him and commented on.
In the advice, Mr Altman concluded that he had seen no evidence to suggest that Post Office exercised its investigations and prosecution functions in anything other than a well organised, structured and efficient manner, through an expert and dedicated team of in-house investigators and lawyers supported by Cartwright King
Solicitors and their in-house counsel, as well as external counsel and agents when required.
He concluded that there was no good reason to recommend that the Post Office should discontinue its prosecution role. He did, however, make some recommendations for improvements.
This advice contained, at the end of it -- and we'll
see this when we come to examine it -- a brief CV of its author, Mr Altman, by way of footnote, and recorded that he had been First Treasury Counsel and was, amongst other things, a recorder of the Crown Court and a Bencher of Middle Temple.a Bencher of Middle Temple.
is a less serious offence to that of theft is incorrect.
Both offences are equal in law: both are offences of dishonesty and both carry the same maximum sentence ..."

The advice noted that Sir Anthony Hooper, meanwhile,
had said that false accounting was a lesser charge than theft and that Second Sight were not incorrect to characterise it as such. The advice from Mr Altman was sought to ensure that the statement made to Second Sight to the contrary by the Post Office was "defensible".

Mr Altman's view is set out at POL00006588 at page 5 . He says:
"If I may say so, the so-called 'equality' of the offences is an unnecessary and unprofitable focal point of attention. The other issues raised by the letter have greater force and are defensible."

His conclusions at page 7 were as follows:
First, both offences of theft and false accounting
do involve dishonesty and do carry a maximum sentence of 7 years' imprisonment.

The only argument that may be advanced to defend the statement is that it is accurate 'within the narrow context within which it was stated'.

Third, the point was that false accounting may be a lesser offence, and may often be a lesser offence in the context in which it is charged, so to argue that it

The Inquiry will consider what role advice of this kind, presented in this way, had in the Post Office's subsequent conduct and whether advice of this kind provided the Post Office and its leadership with a comfort blanket.

Moving to 2015, on 8 March 2015, Mr Altman gave important advice to the Post Office, concerning the charging of theft and false accounting. That's POL00006588.

This was during the course of the investigation by Second Sight, just before their contract was terminated or ended, and the premise of the advice was that Second Sight were "beginning to advance arguments that [the Post Office] is abusing its prosecutorial role by charging subpostmasters with theft, when there is no evidence of it, in order only to pressure subpostmasters into pleading guilty to false accounting".

Cartwright King had advised that that suggestion, the suggestion that the offence of false accounting was a less serious to that of theft, was incorrect because they were both offences of dishonesty and both carried the same maximum sentence.

That position was communicated to Second Sight -see POL00040868 -- as follows:
"The suggestion that the offence of false accounting 142
is not a lesser offence is not accurate; it all depends on the circumstances of the individual case.

Fourth, the statement was undermined by the fact that the seriousness or otherwise of any offence of theft or false accounting must always depend on its own facts, as is demonstrated by the many ways in which such offences may be committed, and how offenders may be sentenced for them.

What does not appear is a blunt and unequivocal statement to the effect that, where both theft and false accounting are charged for the same conduct, the charges of false accounting may be seen as less serious, which appears to be exactly the point that Second Sight and Sir Anthony Hooper were both identifying. Also not addressed is whether, in practice, an innocent person may be more likely to plead to what may be perceived as a less serious charge and whether barristers and solicitors are likely to advise their clients that false accounting is, in practice, less likely to result in a prison sentence.

Another significant strand of legal advice was provided in the form of a review conducted on behalf of the then chairman of the Post Office by this time, Tim Parker, on 8 February 2016. The reference is POL00006355.
It was carried out by Jonathan Swift (then Queen's Counsel, now a High Court judge, and former First Treasury Counsel) together with a junior, Christopher Knight. I'm going to call this document the "Swift Review".
The purpose of the Swift Review was said to be to consider whether any further action could reasonably be taken by the Post Office to address the complaints by subpostmasters about their treatment. The review concentrated on four areas: first, criminal prosecutions; second, the Horizon System; third, the support provided to subpostmasters through training and helplines; fourth, the investigations into the circumstances of specific complaints, where a complaint had been made.
First, criminal prosecutions.
In respect of the safety of convictions and the
disclosure of information, the Swift Review noted that
none of the Second Sight Report identified systemic
flaws in the Horizon System, likely to have caused the losses incurred at the relevant branches. Rather, it was said that operator errors at the counter was the usual cause identified by Second Sight, with the likelihood of those errors being exacerbated by problems in training and support.
reasonably in its handling of disclosure issues, is a conclusion of some significance. We will investigate the basis of the conclusion. Was the Swift Review given sufficient disclosure by the Post Office, for example, in this regard? Was there information that this Swift Review was not provided with which might have altered the conclusion? Was too much reliance placed on the previous advice of Mr Altman and the Second Sight review?

In respect of the sufficiency of evidence, the Swift Review noted the allegation that the Post Office had too readily brought a charge of theft, with the aim or effect that a subpostmaster is pressurised into pleading guilty to false accounting, in the hope that the theft charge is dropped and because a theft charge would more readily enable the Post Office to recover its losses.

They noted one case, in which there was a guilty plea to false accounting in return for which a theft charge was not pursued, where certain documents in the prosecution file indicated that initial Post Office investigators could not find any evidence of theft, despite it being charged.

In this regard, the Swift Review relied on
Mr Altman's advice of 8 March 2015, that I have already mentioned, where he has said that it was not a helpful

From this, the authors of the swift report understood:
"There is no evidence that the Horizon System ... is responsible for the losses which have resulted in convictions."

That's paragraph 95.
The Swift Review observed that a considerable exercise had been undertaken by Cartwright King in 2013 that was the subject of advice and oversight by Mr Altman. Mr Altman had considered both the process adopted by Cartwright King and their actual decisions in a sample of cases, to be reasonable and proportionate. The Swift Review also reviewed a small sample of reviews that had been conducted by Cartwright King.

The conclusion of the Swift Review in this respect, same reference, page 33, is:
"We are accordingly content that POL has acted reasonably in its handling of disclosure issues, arising in relation to past criminal prosecutions."

Following this conclusion, the Swift Review stated that it would be inappropriate for the Post Office to conduct a wider review of the safety of any particular conviction when that work was being carried out by the CCRC.

That conclusion, that the Post Office had acted 146
question as to whether theft and false accounting were offences of equal seriousness. It also noted, for example, that the decision to plead guilty was a matter for the defendant alone, that the Post Office's position was that its prosecutorial decisions were always taken in accordance with the Code for Crown Prosecutors and that Cartwright King must have considered the evidence.

The Swift Review noted the Post Office's position that, because of these points and because of any review would be carried out with the benefit of hindsight, it would not be an appropriate course of action now to review prosecution files, to reconsider the sufficiency of evidence issue.

The authors of the Swift Review strongly disagreed. They stated, page 35, same reference:
"We do not agree. We have reached the view that this issue is one of real importance to the reputation of POL, and is something which can feasibly and reasonably be addressed now. It is clear that it is not an exercise which has been carried out so far, and Cartwright King were not asked to consider the sufficiency of evidence when undertaking their disclosure review. We do not think it is safe to infer that any advice Cartwright King gave on POL's position on any appeal must have involved a full evidential

148
review. The allegation that POL has effectively bullied 1 [subpostmasters] into pleading guilty to offences by unjustifiably overloading the charge sheet is a stain on the character of the business. Moreover, it is not impossible that [a subpostmaster] will have felt pressurised into pleading guilty to false accounting believing it to be less serious when they might not otherwise have done so; the phenomenon of false confessions is well known."

Your Inquiry will investigate how widely this part of the advice, in which strong advice was given, was shared and, if not, why not? It has been reported that the advice was not shown to the board of the Post Office, despite such trenchant criticism being made in the passage that l've just cited. We'll investigate those reports of how widely the advice was shared are correct and, if they are correct, why the advice was not shown to the board.

The Swift Review then looked at the criticism that had been levelled at the Post Office concerning its ability to conduct private prosecutions in the absence of specialist criminal expertise that the police has or the independent view that's supplied by the CPS.

This was dealt with briefly in the advice, which noted that Mr Altman had provided advice in this regard 149
saw no basis to recommend further action be taken on the
bugs that had been identified.
However, the Review raised concerns that the analysis that had so far taken place was "bottom up", in the sense that it started from and focused on the specific circumstances of the branch, rather than the top-down approach of searching for patterns of unusual behaviour in individual branches and across branches on a purely data-driven analytical basis, which might suggest a wider problem.

The review then looked at the consistent assurances from the Post Office and Fujitsu that transaction records and therefore branch balances could not be remotely altered without the knowledge of a subpostmaster.

The Swift Review considered a range of evidence, including the Second Sight Reports and the reports produced by Deloitte in May and June 2014, and it concluded as follows, this is POL00006355, at page 51:
"It seems to us that the Deloitte documents in particular pose real issues for POL. First, both the existence of the Balancing Transaction capability and the wider ability of Fujitsu to 'fake' digital signatures are contrary to the public assurances provided by Fujitsu and POL about the functionality of 151
on 31 October 2013 and that a revised prosecution policy was awaiting approval.

The review made two recommendations in respect of criminal prosecutions. Firstly, that advice be sought from counsel as to whether the decision to charge a subpostmaster with theft and false accounting could undermine the safety of any conviction for false accounting, where the conviction was on the basis of a guilty plea, following which, and/or in return for which the charge of theft was dropped, and where there had not been a sufficient evidential basis to bring the theft charge.

Secondly, if such a conviction could be undermined in those circumstances, that counsel review the prosecution file in such cases to establish whether applying the facts and law applicable at the relevant time, there was sufficient evidential basis to conclude that a conviction for theft was a realistic prospect, such that the charge was properly brought.

The Swift Review accepted, when it considered the Horizon System on the basis of what the authors had seemingly been told, that the Horizon System works "effectively and accurately for the overwhelming majority of the time and, for the overwhelming majority of its users, is accurate", that's paragraph 119, and 150
the Horizon System ... in the light of the consistent impression given that they do not exist at all, we consider that it is now incumbent upon POL to commission work to confirm the position insofar as possible ... Second, the Deloitte reports, or at least the information contained within them, may be disclosable under POL's ongoing duties as a criminal prosecutor."

As I have already observed, remote access was a matter that appears to have been denied by the Post Office until 2019, until part way through the Group Litigation, yet it was raised as a significant issue once again in this review, in February 2016. The chairman, Tim Parker, on behalf of whose review this took place, chaired the Post Office throughout the Group Litigation. The Inquiry will investigate what, if any, action was taken by him at this time.

In the light of these findings, the Swift Review recommended, first, that the Post Office consider instructing a suitably qualified party to carry out an analysis of the relevant transaction logs for branches within the scheme to confirm, insofar as is possible, whether any bugs in the Horizon System are revealed by the dataset which caused discrepancies in the accounting position of any of those branches.

That the Post Office, secondly, consider instructing
152
a suitably qualified party to carry out a full review of 1
the use of balancing transactions throughout the
lifetime of the Horizon System, insofar as possible, independently to confirm from the Horizon System records the number and circumstances of their use.

Third, that the Post Office instruct a suitably
qualified party to carry out a full review of the controls over and use of the capability of authorised Fujitsu personnel to create, amend or delete baskets within the sealed audit store throughout the lifetime of the Horizon System, insofar as possible.

Fourth, that the Post Office sought specialist legal advice from external counsel as to whether the Deloitte reports or the information with them, concerning balancing transactions and Fujitsu's ability to delete and amend data, should be disclosed to the defendants of criminal prosecutions brought by Post Office. This advice should also address whether disclosure should be made, if it hadn't been made, to the CCRC.

The Inquiry will seek to establish what action was taken as a result of that advice.

In terms of the support provided to subpostmasters, the Swift Review noted that complaints had been made regarding the training that subpostmasters had received, and allegations that the support provided through the 153
entitled to treat only those who had applied to the scheme as raising serious or material complaints about Horizon and the Post Office's treatment of them.

The review considered the processes involved in the scheme and considered in detail a 10 per cent sample from those cases where there had not been a conviction. That limited sample was only 11 cases in total. The Swift Review was seemingly impressed by the work that had been carried out by the Post Office. In some respects, the Review was critical of the lack of assistance by subpostmasters in highlighting potential causes or time periods, or errors in the information that they had given. The review stated that it was extremely difficult for any third-party or the subpostmaster, with the passage of time, to review the records to identify precisely what went wrong.

They expressed surprise at how many of these cases involved -- to use the words of the authors -- blatant instances of false accounting rendering POL's task of assisting the subpostmaster in working out where problems had arisen very much harder, without an accurate reference point from which to work.

The Swift Review made only one recommendation in respect of the scheme. This concerned an issue which had been raised by Second Sight in relation to the

NBSC was unhelpful and misleading. This was not a significant part of the review, it seems, because the authors acknowledged several limitations in the ability definitively to deal with each individual allegation. However, during the course of the investigation it had emerged that calls to the NBSC were recorded against the identity of the call handler and it was, therefore, possible for the Post Office to cross-reference complaints against the personnel files of call handlers.

They recommended as follows: first, that POL cross-reference specific complaints about misleading advice from NBSC call handlers with the possible employees who provided that advice and consider their personnel files, where available, for evidence as to the likelihood that the complaint may be well founded.

The authors did not make recommendations with regard to training and support on the basis that, rather than looking at past cases, this was an area that the great attachments of work could be done to improve the situation in future and that the Post Office had already accepted the need to do that work across all areas of the business and in detail.

In the final section of the Swift Review, concerning the independent Mediation Scheme, that part of the review proceeded on the basis that the Post Office was 154
handling by the Post Office of unmatched credit balances in its own suspense account, in respect of third party clients, such as Santander or Bank of Ireland.

Second Sight had identified that, where there were significant sums in unmatched balances, it was possible that at least some of the money would reflect uncorrected transaction discrepancies, in particular branches.

The Swift Review found this was worthy of investigation and recommended that POL Commission forensic accountants to review the unmatched balances on POL's general suspense account to explain the relationship or lack thereof with branch discrepancies and the extent to which those balances can be attributed to and repaid to specific branches.

The Inquiry will be considering what information was provided to the Swift Review and, in particular, whether the authors were aware of all of the information which raised reliability issues, which I have mentioned over the course of the past day and a half.

If they were not provided with this information, was that intentional and who made the decision not to provide them with it? Why did the authors meet, amongst others, Gareth Jenkins, and what did they know of the concerns that had been raised concerning his

156

The Inquiry will investigate how this advice fits with public comments that have been made by Sir Anthony Hooper, who was directly involved in the mediation process. He had expressed views most recently that he pointed out to the senior management of the Post Office that there was unlikely to be theft in the cases that he had seen because of number of factors, including, first, the previous good character of the postmasters concerned; secondly, the shortsighted nature of any theft, given that the subpostmasters would be liable to make up any shortfalls; and, thirdly, that there was nothing to suggest that they were stealing and no actual evidence of financial loss. For him, the more likely cause was that it was down to Horizon.

You will investigate how that advice to the Post Office sits with other advice that was obtained, which was supportive of the Post Office's approach to theft charges.

Mr Altman also provided an advice called "Advice on settlement", which addressed the risk to the safety of convictions if Post Office entered into settlement with any of the claimants in the Group Litigation. The advice, dated 17 July 2019 -- there's no need to turn it up, it's at POL00006401 -- was as follows:

1. Any admission of wrongdoing by the Post Office 159
credibility?
Importantly, the Swift Review was identified by Paul Scully, the relevant minister in 2020, as having concluded that "there were no systemic problems with the Horizon System".
The Inquiry will look into the extent to which that often repeated phrase was actually an accurate reflection of the Swift Review. You will hear about who saw the full report and when and, where it wasn't shared, why it wasn't shared.
Further advice from Mr Altman.
He was asked to advise the Post Office following the
Swift Review, and this advice was dated 26 July 2016, entitled "Review of Post Office Limited Criminal Prosecutions". It's to be found at POL00006394. He reviewed eight individual cases that were apparently selected because they were high profile cases within the Group Litigation or CCRC cases.
Mr Altman concluded that those cases that fell squarely within the remit of his review were conducted in such a way that the allegation that Post Office had operated a deliberate policy to charge theft, when there was no or no sufficient evidence to support it, just to encourage or influence pleas of guilty to charges of false accounting is "fundamentally misplaced".

He stated:
"Not only is there no evidence of such a policy, there is positive evidence that such that each case was approached both by internal and external lawyers professionally and with propriety and, unquestionably, case specifically."

He went on:
"Not only have I found absolutely no evidence of the existence of any such policy, I have also not discovered any evidence in the cases that I have been invited to review that theft (or fraud for that matter) was charged without any proper basis to do so and/or in order only to encourage or influence guilty pleas to offences of false accounting."

Mr Altman also touched on the issue of whether it was inappropriate to use the criminal justice system as a means of enforcing repayment from offenders by charging and pursuing offences that will result in confiscation and compensation orders. His view was that, based on the Code for Crown Prosecutors, it was appropriate to consider, amongst other things, when selecting charges, the court's sentencing powers and the imposition of appropriate post-conviction orders and that, in the cases he reviewed, these considerations were properly made.
to convicted Claimants was to be avoided "as is any public apology that risks misinterpretation or the implication of an admission of fault".
2. There was "a real risk of Post Office taking an approach which could be interpreted as incongruous with the processes it instituted as a prosecutor".
3. Settlement would invite critical scrutiny not only of Post Office's prosecution function but also of its prosecutorial decision making function during the pre-trial and trial processes.
"4. Settling or seeking to settle "may be viewed as a sign of weakness, a lack of confidence in both its civil and criminal cases by the convicted claimants, as well as the CCRC, who may then be encouraged to investigate 'the technical aspects' of the case heard the Horizon Issues Trial evidence and seek to appeal or to make a reference, which will potentially open the settlement agreement (or the rationale underlying it) to consideration or questioning by the Court of Appeal as part of any appeal/reference hearing."
5. There was, in Mr Altman's judgment, "some risk to the safety of convictions of including convicted claimants in any settlement agreement or package".

As I noted in respect of the earlier advice, the Inquiry will look at the role that advice of this kind

160
from senior lawyers had on the strategy that was adopted by the Post Office towards mediation and settlement.
"Is it right to delay or avoid settlement because of the impact that it might have on a criminal appeal?" is the question that might need to be addressed.

Further advice was provided by Mr Altman on the Common Issues Judgment and the Horizon Issues Judgment. In the latter advice, Mr Altman advised on the impact of Mr Justice Fraser's judgment on criminal convictions and resultant disclosure obligations. His advice was that appellants in the CCRC would have a high hurdle to overcome in respect of non-disclosure because they would have to show that it was material. At the end of his advice, Mr Altman noted that the apparent late concession in the litigation to entries having been "entered/edited/deleted negligently or dishonestly" remotely was a "startling concession" and requested further information in that regard.

Your Inquiry may investigate the extent to which those who were advising the Post Office were provided with sufficient information on which properly to advise.

It wasn't just Mr Altman or Sir Jonathan Swift who provided advice to the Post Office. There was, of course, a large legal team who represented and advised the Post Office in respect of the Group Litigation. 161
that the "very strong advice" was for Mr Parker's review to cease, with some of the recommendations being implemented by the legal team to seek to preserve privilege.

Therefore, the Inquiry will investigate both the effect of the litigation strategy on the Bates claimants themselves but also on the wider impact that it had on the Post Office's response to the emerging scandal as a whole. In particular, you may wish to consider whether the strategy in the Bates litigation resulted in delays to the overturning of convictions or delays to changes in practice in respect of Horizon.

I've already set out the background to the substantive judgments by Mr Justice Fraser, upon which this Inquiry builds. He was critical of the Post Office's approach to the litigation. You will, in due course, be referred to a significant amount of expert and legal advice, much of which was previously privileged, that fed into the Post Office's decision making. In particular, you will be referred to the input that Fujitsu had into preparing for the Horizon Issues trial. Again, Gareth Jenkins emerges as a key player in this regard.

You will also read the advice that the Post Office received from legal professionals. You will read that 163

Can I refer you to issues 178 to 181, sir, in the completed list of issues. Your Inquiry is tasked to determine whether the litigation strategy adopted by the Post Office was appropriate, in doing so, you will wish to consider the content of legal advice provided and the extent to which the Post Office relied upon it in adopting the strategy it did to the Bates litigation.

The Post Office was represented by Womble Bond Dickinson LLP, previously just called Bond Dickinson, in the Group Litigation. You will hear that the firm was retained to provide advice in relation to other aspects of the Post Office's response to the emerging scandal but I focus on the GLO action in this opening. Before I turn to discuss the litigation strategy in outline, I must touch on why it is important to address issues beyond the Bates case itself.

You will wish to consider out how that litigation strategy influenced or affected the Post Office's wider response to the emerging scandal.

In a letter at POL00006601 from Womble Bond Dickinson to the Post Office, summarising advice that it had given at a conference on 8 June 2016, it states that Tim Parker, the chairman of the Post Office, was continuing to consider the recommendations from the Swift Review, which I raised earlier. The letter says 162

Womble Bond Dickinson provided advice to the Post Office on the potential for a group action in 2014, and then acted in the claims that arose, and that various leading counsel -- Queen's Counsel, as they then were -- and junior barristers, acted for the Post Office in this action. As you would expect for such significant litigation, the legal professionals provided advice regularly and on a great range of matters.

You will read evidence of advice provided to Post Office in steering group meetings, as well as in formal notes and conferences. This advice ranges from the merits of specific points of law as to how to approach key events in the litigation, such as disclosure. By way of example, Womble Bond Dickinson advised the Post Office on the merits of pursuing counterclaims in the GLO, recommending pursuing claims in debt for shortfalls but not damages for loss of profits arising from termination. That's POL00006618.

You will wish to consider the content of the advice received, the extent to which the Post Office relied on it and whether it was reasonable to do so. Accordingly, it will be necessary to consider broadly the merits of such advice. We do not suggest that you subject it to detailed unless and approve or criticise it because you either agree with it or disagree with it. The question 164
must of course be much broader and ask whether the advice on which the litigation strategy was founded was within the range of what a reasonable practitioner might consider to be appropriate.

Moreover, you will wish to consider whether those legal professionals were being given sufficient information to advise the Post Office and Fujitsu. One further point I should address is the recusal application that was made in the Group Litigation. As you are aware, an application for recusal is a serious matter where a party asks a judge to step down from hearing a claim, usually because of alleged actual or apparent bias. It is clear that the Post Office's legal team advised on concerns over Mr Justice Fraser's handling of the litigation, prior to knowing the result of the common issues trial. You will see an update note to Post Office following a case management conference in the Horizon Issues trial, which refers to the fact that the judge did not censure the claimants for a last minute change of position, stating this:
"... reinforced a growing concern that the judge is
not willing to call out bad conduct by the claimants' lawyers even when it is blatant. We can only speculate why he acts in this way, but believe this stems from a fear of negative media comments and/or 165

Horizon Issues trial, even if unsuccessful.
The Post Office sought further advice on this issue
from a former President of the Supreme Court,
Lord Neuberger, and Head of his Chambers, Lord Grabiner, in respect of the application for Mr Justice Fraser to recuse himself.

On 14 March 2019 Lord Neuberger provided an eight-page written advice entitled "Bates and Others v Post Office Limited Observations on Recusal Application".

That's at POL00006398.
Lord Neuberger advised that there were reasonable grounds for the Post Office to bring an application to recuse the judge, and that the Post Office "has little option but to seek to get the Judge to recuse himself at this stage".

Lord Neuberger is subsequently noted to have attended a Post Office Board Meeting and provided advice. That's POL00021562.

It was noted that Lord Neuberger could not represent the Post Office because he was formerly a member of the judiciary.

Shortly afterwards, Lord Grabiner is noted to have given strong advice in conference that the Post Office should pursue the recusal application.
an acknowledgement that the Claimants do not have the best representation and so he is attempting to level the playing field."

Following the draft judgment in common issues, the Post Office's legal team gave initial advice that "the judge's approach is astonishing; it is unfair and unprecedented. With no hesitation, we strongly recommend lodging an appeal."

That's POL00022940.
Leading counsel subsequently advised on the prospects of success of an appeal, POL00023878, and also recommended that the Post Office consider making an application to seek the recusal of Mr Justice Fraser on the grounds of apparent bias.

You will be aware that the test for apparent bias is whether a fair-minded and informed observer, having considered the facts, would conclude that there was a real possibility that the judge was biased. If the answer was yes, the judge must cease sitting on the claim, irrespective of whether he was in fact biased.

This advice on recusal was given the day before the Horizon Issues trial was due to start. The issuing of a recusal application was described as "the nuclear option".

It was clear that it would cause delay to the 166

That's POL00006397. No need to display the document at the moment.

Within the conference note, it says as follows in relation to what Lord Grabiner is said to have advised:
"Lord Grabiner explained that in his view if there is no recusal application made then the Post Office will lose the series of trials set up in this matter. Without a recusal application, Post Office is stuck with this judge. An appeal on the law may correct some of the very significant errors in the Common Issues Judgment, but then the case will be sent back to this Judge who has demonstrable apparent bias against Post Office and hence the firm conclusion that Post Office will lose and the financial impact of that will be substantial. Recusal is therefore essential, and Lord Grabiner asserted that in the face of legal advice from Lord Neuberger that recusal should be applied for, and the quantum of damages that Post Office will pay out on a loss, then it was Lord Grabiner's view that there was a duty on Post Office to seek recusal. Lord Grabiner stated that in his view, the Board of the Post Office had no option but to seek a recusal."

The note of the conference recorded Lord Grabiner advising that there were strong arguments in favour of an application for recusal; it was his strong view that

168
recusal application was the right course of action; and that there was a "serious prospect of success" and "that this judge had done an unbelievable nonsense and demonstrated apparent bias".

The application for recusal was made midway through the evidence in the Horizon Issues trial. As a result, the hearing had to stop whilst the Post Office's application was determined. The application caused significant delay and disruption to the Horizon Issues trial and was subsequently rejected by Mr Justice Fraser.

The Post Office sought to appeal that decision.
You'll be aware that the Post Office needed to obtain permission to appeal by showing that there was a real prospect of success, or some other compelling reason to hear the appeal. Lord Justice Coulson refused the application for permission to appeal, and delivered an unusually lengthy set of reasons for doing so. Those reasons were highly critical of the Post Office and stated that "the recusal application never had any substance".

Once again, the role of lawyers, some of them
senior, the sufficiency of the information they were given, and the extent to which they were relied on informing the Post Office's litigation strategy will be 169
remainder of the openings.
Can I take it that you were all -- and I'm
addressing Mr Beer, but I'm talking to all the Core
Participants who wish to make an opening -- are you
still reasonably confident that we will complete all the openings by a reasonable time on Friday?
MR BEER: Sir, yes we are, because Mr Moloney, Mr Stein and
Mr Henry have told me that their estimates have reduced
somewhat from those that were originally given, and in
any event we had, if you remember, the spare afternoon on Friday afternoon.
SIR WYN WILLIAMS: Yes. I raised it in particular because in our provisional timetable only 30 minutes was set aside for UKGI, but in writing at least, there's quite a long opening to be made by that party, so I just wanted to be clear that it could all be accommodated this week.
MR BEER: Yes. I don't think they've actually notified an expanded time estimate. Mr Mertens is just getting to his feet.
MR MERTENS: Yes, and thank you very much. We don't expect to be more than 30 minutes.
MR BEER: Fantastic. Thank you very much. Just one piece of house --

SIR WYN WILLIAMS: Sorry, I missed that, Mr Beer. The 171
examined. I have only examined one of the issues that arises in this part of the Inquiry's list of issues.

Sir, that is I want to say about Phases 4 to 6 .
Finally, and most likely around this time next year, the Inquiry will address current practices and procedures and recommendations for the future. By examining, in Phase 7, current practice, sir, you will be able to consider whether the Post Office, Fujitsu, the Department for Business, Energy and Industrial Strategy, and any other relevant organisations and individuals have learned from these experiences or, on the other hand, whether any further changes need to be made by way of recommendations by you.

Sir, that's all I intended to say. I say "all" -it was quite a lot. That's all I wish to say in opening the upcoming phases of the Inquiry to you, sir. I've said to other Core Participants that it was unlikely that I would finish before 4.10, and therefore it was unlikely that that you would call on them today, and therefore the subpostmaster Core Participants have arranged for their clients to start viewing tomorrow morning. I trust that wasn't out of order.

## HOUSEKEEPING MATTERS

SIR WYN WILLIAMS: Not at all, Mr Beer. I'm very grateful for your opening, and I look forward to hearing the 170
screen didn't move quickly enough.
MR BEER: I can repeat what Mr Mertens said. He got to his feet and said they are not going to be more than 30 minutes, UKGI.
SIR WYN WILLIAMS: Fine. Right. Well, that solves the problem.
MR BEER: It does. Just one piece of housekeeping. Can I repeat, by way of parish notices to people, the need to ensure that they lodge with the Inquiry at "thecounsel@" email address any questions that they wish to ask, or wish us to ask, of any witnesses in this phase of the Inquiry 14 days before that witness gives evidence. We haven't received many questions set so far. Quite a few were received today, but they are obviously a little late. We could, on one view, think that that means nobody wants any questions asked, or that they don't want to ask any questions themselves. We don't think that's the case.

Can I therefore reiterate a plea that was sent out in an email last night from the solicitors to the Inquiry that such pro formas are received by 4.00 pm , 14 days in advance of the day on which the witness gives evidence. It's not particularly for my benefit or the counsel team's benefit so we can spent longer thinking up our questions. It's so the Inquiry can notify

172
witnesses of the documents to which they may bereferred, and in many cases provide them with thedocuments in hard copy.
A number of the people concerned are of an older4

generation, and do not have access to information ..... 5technology that allows them to view documents online.
We therefore have to print all of the documents to which ..... 7
they might be referred, bundle them up in a convenient ..... 8
way, and courier them to them. ..... 9
Any days that are missing under 14 days interferes ..... 10
with that process very significantly ..... 11
SIR WYN WILLIAMS: Well, clearly, Mr Beer, I want to endorse ..... 12
what you've just said. I think I should note that ..... 13
perhaps unusually, in a modern Inquiry, I am prepared to ..... 14
countenance persons other than you and your team asking ..... 15
questions. ..... 16
I thought that to be appropriate in this particular ..... 17
Inquiry, but for that to work, we need to stick rather ..... 18
rigidly to the timescales that you're talking about, ..... 19
otherwise I fear we will get into all kinds of ..... 20
logistical problems. ..... 21
So I endorse entirely what Mr Beer has said. ..... 22
MR BEER: Thank you very much, sir. So 10.00 tomorrow, ..... 23
please. ..... 24
THE CHAIRMAN: Yes. See you all tomorrow at 10.00 . ..... 25

```
MR BEER: Thank you.
(4.10 pm)
    (The hearing adjourned until 10.00 am the following day)
```

|  | 69/13 69/17 69/2 | 140/8 | 2004/05 [2] 87/5 88/8 | 21.27 [1] 134/20 |
| :---: | :---: | :---: | :---: | :---: |
| MR BEER: [21] 1/4 |  | 15 years [1] 125 | 2005 [2] 11/23 21 | 6/15 |
| 1/7 1/12 5/8 5/10 47/6 | 1.10 [1] 22/5 | 15.1.3 [1] 28/22 | 2006 [5] 11/19 43/20 | 22 [1] 94/17 |
| 47/11 47/13 7 | 1.165.7 [1] 9/11 | 150 applications [1] | 49/10 73/6 73/15 | 22 June [1] 51 |
| 99/21 100/1 136/20 | 1.9 million [1] 87/12 | 112/9 | 2007 [5] 12/3 63/6 | 22 June 2010 [1] 51/1 |
| 136/25 171/7 171/18 | 10 [5] 11/16 29/5 45/4 | 16 [1] 38/22 | 77/16 80/11 84/2 | 22 March 2017 [1] |
| 171/23 172/2 $172 / 7$ | 61/8 155/5 | 165.14 [1] 10112 | 2008 [1] 127/2 | 2/1 |
| 173/23 174/1 | 10 August [1] | 17 April 2001 [1] 34/1 | 2009 [4] 48/5 74/22 | 22 September 2014 [1] |
| MR MERTENS: [1] | 10 December 2019 [1] | 17 December [1] | 91/14 102/25 | 123/20 |
| 171/21 | 97/8 | 105/19 | 201 [1] 59/22 | ,778.40 [1] |
| WYN WILLIA | 10 Marc | 17 July 20 | 2010 [19] 12/9 29 | 23 April 2021 [1] |
| [18] 1/5 1/9 5/5 5/9 | 125/22 | 159/23 | 29/16 49/6 50/4 50/14 | 139/22 |
| 47/3 47/7 47/12 70/21 | 10.00 [4] 1/2 | 178 [1] | 20 53/1 5 | 24 February 2010 |
| /3 99/19 99/25 | 173/25 174/3 | 18 [1] 43/3 | 55/10 56/12 95/17 | 50/14 |
| 136/18 136/21 170/24 | 10.40 [1] 62/8 | 18 months [1] 129/4 | 95/17 96/20 103/9 | 25 [2] 42/15 94/14 |
| 171/12 171/25 172/5 | 10.5 million [1] 97 | 18 November 2013 | 113/14 132/21 134/5 | 25 identified [1] |
| 173/12 | 100 [1] 50/18 | 112/10 | 2011 [5] 68/21 69/2 | 25 July [1] 123/3 |
| THE CH | 100 calls [1] 25/10 | 181 [1] 1 | 69/15 70/1 80/12 | 25,000 [2] 88/9 88/1 |
| 173/25 | 1004 [1] 96/12 | 184 [1] 59/21 | 2012 [8] 47/18 69/1 | 250016.45 [1] 30/6 |
|  | 11 [3] 25/23 28/3 155/7 | 187,000 [1] 55/22 | /18 69/20 70/4 91/21 | 26 August 2013 [1] |
|  | 11 days [1] 11/16 | 19 [1] 50/7 | 105/5 128/20 | 111/24 |
|  | 11.20 [1] 47/8 | 19 December | 2013 [32] 68/21 69/20 | 26 July 2016 |
| 'basic' [1] 6/20 | 11.35 [2] 47/4 47/ | 141/4 | /24 101/9 101/12 | 157/13 |
| 'discard' [1] 51/5 | 119 [1] 150/25 | 19 February 2010 [1] | 101/19 102/6 103/16 | 26.1 [2] 128/17 |
| 'equality' [1] 143/12 | 12 February [1] 29/15 | 50/4 | 104/8 104/11 107 | 6.2 [1] 129/3 |
| 'fake' [1] 151/23 | 12 June 2013 [1] | 1997 [1] | 111/24 112/10 112/21 | 26.3 [1] 129/13 |
| 'fit [3] 134/2 134/11 | 103/16 | 1999 [4] 2/11 6/3 7/6 | 113/2 113/18 114/18 | 27 [1] 80/3 |
| 135/6 | 12 October 2022 | 7/9 | 117/19 118/1 118/12 | 27 June [1] 114/ |
| 'Horizon [2] 134/4 |  | 2 | 1/15 122/21 135 | 1] 43/3 |
| 135/8 | 12 such |  | 136/17 137/2 137/8 | 28 April 2000 [1] |
| Iff [2] 119/15 119/17 | 12.58 [1] 99/22 | 2 Augu | 137/11 139/3 140/8 | 28 June 2013 [1] |
| 'lived [1] 34/9 | 12/02/2010 [1] 29/16 | 2 August 2010 [1] | 141/2 146/8 150/1 | 114/18 |
| 'mysterious [1] 10 | 13 [2] 58/6 115/3 | 53/1 | 2014 [8] 123/3 123/17 | 29 June 2015 [ |
| 'seek [1] 128/21 | 13 February 2013 | 2 | /20 124/1 1 | 135/18 |
| 'settle [2] 75/575/7 |  |  | 2015 [13] $91 / 2496 / 20$ | 3 |
| 'shredded' [1] 119/9 | 13.09 [1] 63/22 <br> 14 [4] 70/3 106/2 | $2.00 \mathrm{pm}[1] 99 / 2$ | 5 [13] 91/24 96/20 $1 / 25$ 102/6 125/9 |  |
| 'spike' [1] 23/17 | 14 [4] 70/3 106/2 109/6 172/12 | 2.1 [2] $97 / 15$ 126/ | $1 / 25$ 102/6 125/9 <br> 5/22 126/9 132/19 | $\begin{aligned} & 3 \text { Febru } \\ & 125 / 9 \end{aligned}$ |
| 'the [2] 134/3 160/15 'within [1] 143/21 | 14 April 2022 [1] 11/14 | 2.59 [1] 136/22 | $\begin{aligned} & 125 / 22 \text { 126/9 132/19 } \\ & 132 / 25135 / 181216 \end{aligned}$ | 3.1.1 [1] 23/12 |
|  | 14 days [2] 172/22 | 2.8 million [2] 87/1 | 2/6 147/2 | 3.15 [2] 136/20 136/2 |
| - | 10 | 87/12 | 2016 [6] 102/12 102/17 | 3.3.1 [1] 23/12 |
| -200016.45 [1] 30/6 | 14 | $20[2] 87 / 1388$ | 144/24 152/12 157/13 | 3.30 pm [1] 25/10 |
| 0 |  | 35/19 62/8 95/1 |  | 30 [4] 91/16 11 171/13 171/22 |
| 05 [2] 87/5 88/8 | 15 [2] 37/16 63/13 | 200016.45 [1] 30 | 2019 [4] 97/8 152/10 | January 2013 [ |
| 1 | 15 August [1] 98/22 | dil 44 | 159/23 167/7 |  |
|  | 2013 [1] |  | 17/20 157/3 |  |
|  | 18 | 55/18 55/19 63/14 | 2021 [2] 100/5 139/22 | y 2013 [1] |
| 1 May | 15 million [1] $97 / 17$ |  | /1 11/14 |  |
| $1 \text { October } 2013 \text { [1] }$ | inutes [2] 47/5 | 2 | 2014 [1] | 31 October 2013 |
|  | 15 October 2013 [1] | 2004 [3] 33/2 56/3 87/4 | 21.21 [1] 133/19 | 31st July [1] 119/2 |


| 3 | 144 | 14 | $114$ | [1] 139/12 |
| :---: | :---: | :---: | :---: | :---: |
|  | 8 July 2013 [1] 113/2 | absolutely [2] 125/19 | 156/12 | action [16] 21/21 |
| 34,028 [1] 84/10 | 8 June [1] 162/22 | 15818 | accountant [1] 103/23 | $27 / 1687 / 3$ |
| 35[2] 87/22 148/1 | 8 March 2015 [2] | absurd [1] 85/6 | accountants [3] | 1 121/10 |
| 37 [2] 115/4 122/15 | 142/6 147/24 | abuse [1] 100/8 | 101/13 105/7 156/1 | 8/11 151/1 152/ |
| 38 [1] 115/20 | 8 October 2004 [1] | abusing [1] 142/1 | accounted [2] 73/1 | 20 162/13 16 |
| 3 rd [1] 24/18 |  | accept [3] 49/23 74/10 | 74/4 | 4/6 169/1 |
| 4 | 819-page [1] 4/24 | acceptable [1] 6/16 | 6/22 7/1 44/20 44/2 | 7/23 112/18 |
| 4 July | 85 [1] 9/7 | acceptance [5] 6/3 | 45/8 46/5 48/8 48/2 | activities [2] 31/15 |
| 4 May [1] 24/17 | 9 | 716 49/18 52/10 53 | 52/23 53/6 54/1 56/13 | 121/21 |
| 4 s [1] 124/1 |  | accepted [6] 74/13 $77 / 795 / 8106 / 24$ | 67/23 74/1 75/15 76/3 $77 / 19$ $79 / 15$ $81 / 16$ $83 / 6$ | acts [1] 165/24 actual [7] $45 / 1767 / 7$ |
| 4.00 [1] 172/21 | $\begin{aligned} & 9 \text { April } 2015 \text { [2] } 101 / 25 \\ & 126 / 9 \end{aligned}$ | $77 / 7$ 95/8 106/24 $150 / 20$ 154/21 | 77/19 79/15 81/16 83/6 84/3 102/10 123/11 | actual [7] 45/17 6 74/3 94/16 146/11 |
| 4.10 [2] 170/18 174/2 | 9 September 2013 [1] | accepting [2] 46/6 | 142/8 142/17 142/19 | 159/12 165/12 |
| 4.3.2 [1] 37/16 | 139/3 | 85/1 | 142/25 143/5 143/1 | actually [8] 24/17 38 |
| 4.6 [1] 134/1 | 95 [3] 9/13 45/3 146/6 | access [45] 27/11 36/5 | 143/23 144/5 144/11 | 45/4 54/15 95/5 108/6 |
| 4.7 [1] 38/23 | 95 per cent [1] 10/14 | 36/7 36/8 36/11 36/13 | 144/12 144/19 147/14 | 157/7 171/18 |
| 41 [2] 71/6 122/19 | 975 [1] 96/17 | 36/25 37/2 37/4 37/18 | 147/18 148/1 149/6 | add [1] 13/14 |
| 42 [1] 100/6 | A | 37/23 37/25 38/15 39/2 | 150/6 150/8 152/24 | added [1] 85/11 |
| 42 million [2] 97/20 | A15 [1] 9/8 | $\begin{aligned} & 39 / 8 \text { 39/12 39/16 39/22 } \\ & 40 / 340 / 840 / 1140 / 12 \end{aligned}$ | 155/19 157/25 158/14 accounts [18] 6/19 | dding [1] 130/12 ddition [1] 104/3 |
|  | AA [2] 69/14 69 | 54/5 86/14 89/17 94/3 | 23/18 26/19 58/2 $72 / 4$ | addition [1] [104/3 additional [1] 106/23 |
| $43,000 \text { [1] 62/20 }$ | ability [14] 2/19 35/1 | 95/23 102/1 120/14 | 83/12 87/10 93/7 94/1 | address [26] 5/21 42/6 |
| 47 individual [1] | 46/16 55/4 80/6 | 126/11 126/16 126/19 | 94/24 95/11 95/14 96/4 | 44/10 49/21 58/14 |
| 106/17 |  | 127/19 127/21 128/1 | 96/6 127/4 127/6 128 | 65/13 69/3 89/12 89/1 |
| 48 [1] 71/6 | $149 / 21$ | 128/14 128/23 131/23 | 128/10 | 89/17 89/22 90/1 90/ |
| 49 [3] 59/15 59/16 | able [13] 3/: | 132/1 132/20 132/23 | accumulated [1] 43/ | 99/2 101/7 103/15 |
| 128/15 | $\begin{aligned} & \text { able [13] } \\ & 21 / 17 \text { 27/ } \end{aligned}$ | 133/2 136/12 152/8 | accuracy [3] 45/7 | (2/2 122/24 123/23 |
| 493 [1] 26/15 |  | 173/5 | 48/20 86/15 | 130/15 145/8 153/18 |
| 5 | 8/1 | accommodated [1] | 110/17 143/21 14 | $17!$ |
| 51 [1] 151/19 | about [56] 1/14 2/16 7/20 9/19 16/14 18/1 | 171/16 | 150/25 155/22 157/7 | addressed [16] 35/22 |
| 555 [1] 91/24 | 7/20 9/19 16/14 18/1 | accordance [2] 118/15 | accurately [4] 58/4 | 35/22 39/14 76/20 |
| 57.75 million [1] 97/17 |  | 148/6 | 95/1 134/13 150/23 | 98/23 99/4 101/20 |
| 59,000 [1] 88/15 | 43/4 47/16 47/25 55/3 55/18 58/21 58/22 | accorded [1] 80/22 | achieve [1] 75/2 | 102/6 102/8 108/7 |
| 6 | 60/22 63/8 65/5 66/14 | according [3] 36/14 | achieved [1] 134/19 | 44/ |
| 62 [1] 109/4 | 70/9 70/17 74/19 82/2 | accordingly [6] 9/20 | acknowledged [4] | addressing [5] 29/2 |
| 7 | 23 98/21 99/16 | 32/6 80/21 116/4 | 53/8 77/21 122/2 154/3 | 89/4 102/18 133/6 |
| 7 years' [1] 143/19 | 103/3 105/2 106/22 | account [41] 6/9 6/10 | 166/1 | adequacy [8] 3/4 3/20 |
| 7,000 [1] 125/17 | 110/18 113/1 114/19 | 6/13 23/23 43/17 43/22 | acknowledging [2] | 3/24 5/25 7/21 22/22 |
| 7.2.2 [1] 122/15 | 120/18 122/13 123/5 | 45/20 45/24 53/16 | 110/3 130/18 | 32/17 40/12 |
| 7.3 [1] 109/11 | 123/21 124/7 131/5 | 54/16 54/20 54/25 61/5 | across [6] 3/23 90/15 | adequate [17] 3/6 8/1 |
| 7.4.1.3 [1] 122/19 | 132/24 134/24 140/6 | 65/21 66/20 66/21 | 92/5 133/12 151/8 | 13/11 14/18 15/23 |
| 76 branches [2] 109/1 | 145/9 151/25 154/11 | 66/22 67/11 67/17 | 154/21 | 7/15 18/13 43/11 |
| 110/11 | 7/8 170/3 | 68/18 68/20 68/23 69/6 | act [6] 27/25 28/5 32/8 | 52/16 71/13 71/23 |
| 76.09 [1] 103/22 |  | 6 | 38/7 38/20 118 | 86/25 94/5 94/6 99 |
| 8 | $1 / 2$ | 69/25 71/18 75/13 | acted [8] 19/16 28/16 | adequately [5] 7/23 |
| 8 December [1] 99/8 <br> 8 February 2016 [1] | abrogated [1] 119/25 absence [2] 53/23 | $\begin{aligned} & 75 / 1477 / 2579 / 886 \\ & 96 / 101109 / 511 / 10 \end{aligned}$ | $\begin{aligned} & 52 / 1897 / 19146 / 17 \\ & 146 / 25164 / 3164 / 5 \end{aligned}$ | 9/19 14/16 32/7 49/20 <br> adjourned [1] 174/3 |

## A

Adjournment [1] 99/23
admin [1] 38/1 administration [1] 37/12 admission [3] 97/10 159/25 160/3
admit [1] 133/5
adopt [1] 38/11
adopted [6] 9/22 71/19 125/2 146/11 161/1 162/3
adopting [1] 162/7 advance [2] 142/13 172/22
advanced [1] 143/20
advice [131] 14/6 14/9
14/13 14/16 14/17
14/18 14/22 14/24
15/17 16/2 17/6 17/15
22/15 22/22 24/22 25/4
31/25 32/15 76/7 84/22
90/15 101/6 101/17
101/20 101/22 102/8
102/8 102/9 102/11
102/16 102/19 102/21
113/18 113/20 113/21
114/2 115/3 117/18
117/21 117/22 118/12
118/18 118/19 118/21
119/13 119/22 119/23
120/8 120/9 120/22
121/8 128/24 129/20
136/15 136/16 137/1
137/10 137/11 138/4
138/14 138/16 138/20
138/23 139/15 139/18
140/6 140/14 140/24
141/4 141/6 141/8
141/20 142/1 142/3
142/7 142/12 143/4
143/7 144/21 146/9
147/8 147/24 148/24
149/11 149/11 149/13
149/16 149/17 149/24
149/25 150/4 153/13
153/18 153/21 154/12
154/13 157/11 157/13
159/1 159/15 159/16
159/19 159/19 159/23
160/24 160/25 161/6

161/8 161/10 161/14 161/23 162/5 162/11
162/21 163/1 163/18 163/24 164/1 164/7 164/9 164/11 164/19 164/23 165/2 166/5 166/21 167/2 167/8 167/19 167/24 168/16 advices [4] 101/17
102/5 103/14 112/20
advise [7] 85/21 106/4
115/24 144/18 157/12
161/21 165/7
advised [19] 25/11
113/2 115/20 118/3
120/3 137/2 137/15
137/23 139/6 139/8
140/9 142/18 161/8
161/24 164/14 165/14
166/10 167/12 168/4
advisers [1] 17/19
advises [1] 65/18
advising [4] 35/25
141/2 161/20 168/24
Affairs [1] 103/4
affect [9] 26/9 33/13
35/1 60/17 62/21 67/22
67/22 85/4 96/6
affected [14] 22/15
22/21 26/19 26/22
28/21 34/8 39/22 69/4
70/3 95/11 99/13 109/6
110/11 162/18
affecting [1] 114/17
affects [1] 35/17
affront [3] 100/12
100/23 139/21
afraid [1] $1 / 4$
after [22] 2/8 3/10 12/5
12/6 12/7 22/12 30/2 30/7 43/25 50/24 55/19 all [70] 5/23 16/12 20/6 56/3 78/24 80/11 84/12 96/21 97/21 106/22 108/20 133/24 136/14 137/8
afternoon [3] 1/12
171/10 171/11
afterwards [1] 167/23
again [29] 6/15 10/2
10/10 10/10 10/12 14/21 28/9 28/15 29/15 57/1 66/13 66/21 68/1

68/5 68/7 68/20 74/2
94/10 99/19 101/19
104/2 127/25 128/1
136/15 136/19 140/9
152/12 163/22 169/22
against [15] 29/14
37/11 48/20 53/16
53/25 56/9 73/23 89/12
109/25 110/1 112/18
122/3 154/6 154/9
168/12
Agency [1] 77/17
agents [2] 73/10 141/15
aggregate [1] 97/16
ago [1] 74/13
agree [4] 78/15 81/10 148/16 164/25
agreed [7] 5/4 5/11 10/15 18/9 97/16 105/6 106/8
agreeing [1] 140/15 agreement [5] 9/9 9/11 105/16 160/18 160/23 agreements [2] 23/21 23/25
Ah [1] 5/10
ahead [1] 4/11
aid [1] 24/4
aim [2] 31/20 147/12
aims [1] 31/23
Alan [3] 50/4 91/17
105/9
Alan Bates [2] 91/17 105/9
albeit [4] 16/25 95/25 140/13 140/20
Alderley [1] 56/11
alert [2] 22/12 94/18
alerted [1] 48/21
21/5 31/15 31/16 32/1
34/20 37/18 38/1 43/15 47/12 48/19 50/7 50/22 51/9 53/24 59/7 60/15 60/22 66/2 73/10 74/2 82/1 85/1 88/11 89/1 93/9 95/3 96/7 97/12 98/4 98/18 100/19 100/24 104/13 107/13 111/21 113/3 113/14 114/24 115/5 118/5

118/7 120/13 120/19 120/21 122/20 124/4 124/22 125/25 126/16 131/5 134/12 136/21 144/1 152/2 154/21 156/18 170/14 170/14 170/15 170/24 171/2 171/3 171/5 171/16 173/7 173/20 173/25 allegation [4] 147/11 149/1 154/4 157/21
allegations [4] 53/12 56/1 56/10 153/25 alleged [9] 46/17 94/22 94/23 95/2 95/11 95/23 98/6 132/6 165/12
alleviating [1] 23/24
Alliance [1] 91/13
allocated [1] 3/6
allowed [1] 76/11
allowing [2] 46/22
134/16
allows [2] 78/23 173/6
alone [1] 148/4
along [1] 53/19
alongside [2] 14/6
76/25
alphanumeric [1]
29/20
already [27] 7/2 8/2
12/11 16/15 22/24
49/11 55/11 56/4 60/25
76/4 77/5 77/8 84/1
85/10 85/22 91/1 98/8
103/8 104/2 131/20
132/21 135/15 139/10
147/24 152/8 154/20
163/13
also [61] 1/9 13/22
15/3 15/11 15/23 15/25
19/18 19/20 27/12 36/3
38/21 41/12 46/8 49/21
58/22 59/18 59/23 60/7
72/5 73/16 79/13 79/21
80/2 83/7 86/18 87/1
87/18 87/20 88/1 90/7
94/25 95/7 95/22 96/1
99/4 104/5 109/17
117/6 121/7 121/23
122/16 125/14 129/15
130/25 131/13 133/7

134/7 136/9 137/23
141/2 144/14 146/13
148/2 153/18 158/9
158/15 159/19 160/8
163/7 163/24 166/11
alter [3] 94/4 132/7
132/16
altered [2] 147/6
151/14
alternative [2] 38/11
106/10
alternatively [1] 52/17
although [5] 3/11
84/24 87/16 101/7
108/12
Altman [31] 102/5
102/16 136/16 137/1
137/2 137/11 138/2
138/17 139/3 139/6
139/8 140/8 140/15
140/25 141/2 141/8
141/22 142/6 143/7
146/10 146/10 147/8
149/25 157/11 157/19
158/15 159/19 161/6
161/8 161/14 161/22
Altman's [5] 138/4
138/23 143/10 147/24
160/21
altogether [1] 26/7
always [4] 71/2 134/19
144/5 148/5
am [6] $1 / 2$ 1/11 $47 / 8$
47/10 173/14 174/3
amend [4] 132/2
132/10 153/9 153/16
amended [2] 16/10 16/12
amendments [1] 98/25
Among [1] 93/16
amongst [8] 32/3
101/25 122/5 122/10
125/16 141/23 156/23
158/21
amount [13] 4/2 5/20
17/6 17/11 18/17 31/22
34/18 60/5 63/1 74/18
120/1 120/6 163/17
amounted [3] 49/18
87/11 97/17
amounting [1] 62/19
amounts [2] 75/16

## A

amounts... [1] 87/21
an Acceptance [1] 6/3
an accurate [1] 157/7
an acknowledgement
[1] 166/1
an actual [1] 74/3
an additional [1]
106/23
an advice [2] 113/18 159/19
an affront [2] 100/23 139/21
an agreed [1] 10/15 an aid [1] 24/4
an alphanumeric [1] 29/20
an amount [1] 74/18
an analysis [2] 123/15 152/20
an answer [1] 64/16
an appeal [1] 139/14
an appendix [1] 57/11
an application [1]
165/10
an approach [1] 160/5
an appropriate [5]
46/25 111/1 117/12 135/12 148/11
an archiving [2] 69/2 70/7
an area [1] 154/18
an article [1] 140/1
an audit [1] $23 / 8$
an authorised [1] 28/7
An earlier [1] 141/6
an effective [1] 111/2
an email [6] 34/1
35/14 40/5 50/5 104/8
104/10
an employee [1] 104/4
an error [3] 24/19 35/3 41/7
an example [2] 27/14 30/1
an exercise [1] 148/20
an expert [8] 101/21
104/5 115/11 116/2
116/5 116/9 140/16
141/12
an explanation [1]
64/17
an extensive [1] 17/10 angry [1] 50/12
an extremely [2] 48/16 Anne [2] 35/15 40/5

49/1
an important [6] 1/25
25/19 28/8 30/24 123/25 135/25
an incident [1] 42/4 an indication [2] 4/25 16/25
an individual [2] 66/25 107/22
an initial [1] 101/13
an innocent [1] 144/15 answer [5] 25/1 58/16 an instruction [1]
30/18
an intended [1] 70/6
an intention [1]
139/11
an interest [1] 53/10
an intranet [1] 27/13
an introduction [1]
123/10
an investigation [2]
33/12 121/15
an issue [7] 7/18 14/7
26/13 33/19 52/10
52/16 155/24
an IT [1] 58/7
an objective [1] 53/5
an OCR [1] 36/19
an office [1] 61/16
an Operational [1]
36/18
an otherwise [1] 135/3
an outline [1] 123/14
an overview [2] 18/21
123/9
an unnecessary [1]
143/13
an unusual [1] 110/14
an update [1] 165/16
an updated [1] 126/7
analyse [1] 90/11
analysed [1] 13/10
analysis [13] $1 / 151 / 18$
1/25 2/3 2/7 2/9 43/13
51/8 51/19 121/23
123/15 151/4 152/20
analyst [2] 101/10
103/20
analytical [1] 151/9
Andy [1] 74/23
announced [4] 99/7
111/14 111/16 125/22 announcement [1] 111/25
anomalous [1] 23/19 anonymity [1] 107/24 another [11] 19/20
35/5 36/6 40/14 47/14 54/6 65/3 69/3 80/16 108/18 144/21

64/16 133/22 166/19
answered [1] 115/5
answering [1] 72/2
Anthony [4] 112/7
143/4 144/14 159/2
any [77] 3/2 8/219/19 22/15 26/18 28/10
46/17 48/7 51/19 52/2
57/21 63/17 70/22
72/22 76/15 76/22 77/1
77/22 78/2 79/1 79/17
80/7 81/3 83/2 85/2
88/17 93/19 94/19 96/1
100/17 100/22 106/5
111/22 115/2 116/6
117/13 120/22 121/9
124/22 127/10 127/15
131/23 134/17 136/13
137/25 140/11 144/4
145/7 146/22 147/21
148/9 148/24 148/25
150/7 152/15 152/22
152/24 155/14 158/9
158/10 158/12 159/9
159/11 159/22 159/25
160/1 160/20 160/23
169/20 170/10 170/12
171/10 172/10 172/11
172/16 172/17 173/10
anyone [1] 132/1
anything [2] 115/16
141/10
apology [1] 160/2
apparent [8] 94/23
132/11 161/14 165/13
166/14 166/15 168/12 169/4
apparently [3] 2/14 118/6 157/16
appeal [29] 81/23 82/1

82/2 100/3 100/6 100/9
100/10 100/13 112/8
115/19 117/12 137/5
137/25 138/19 139/14 139/19 139/23 148/25
160/16 160/19 160/20
161/4 166/8 166/11
168/9 169/12 169/14
169/16 169/17
Appeal's [1] 117/23
appeal/reference [1] 160/20
appeals [12] 76/16
90/21 90/24 91/5 99/17 100/1 100/19 100/25 117/19 137/5 138/24 139/19
appear [6] 35/11 84/25 88/16 110/22 138/18 144/9
appeared [8] 2/1 46/7
56/10 72/24 78/20 86/5
131/21 137/16
appearing [1] 51/6
appears [10] 22/2
42/16 79/10 80/24
87/24 103/12 133/2
134/1 144/13 152/9
appellants [1] 161/11
appellants' [1] 100/24
appendix [3] 57/11
57/12 61/9
appetite [1] 88/17
applicable [1] 150/16
applicant [1] 132/4
applicants [2] 126/25
131/21
application [24] 51/2
51/4 51/10 83/19 93/14
123/10 134/5 165/9
165/10 166/13 166/23
167/5 167/10 167/13
167/25 168/6 168/8
168/25 169/1 169/5
169/8 169/8 169/17
169/20
applications [3] 31/17 112/9 112/10
applied [4] 95/6
137/21 155/1 168/17
applying [1] 150/16
appointed [2] 105/11
112/8
appointment [1] 86/3
appreciate [1] 120/25
approach [15] 1/20
12/10 15/14 38/11 43/6
90/18 137/15 139/16
140/25 151/7 159/17 160/5 163/16 164/12 166/6
approached [1] 158/4
approaches [2] 88/20
133/16
appropriate [15] 46/17
46/25 76/2 86/10 99/17
111/1 117/12 135/12
140/23 148/11 158/21
158/23 162/4 165/4
173/17
approval [2] 44/16 150/2
approve [1] 164/24
approximately [2]
51/9 87/11
appsup [2] 40/4 40/7
April [6] 11/14 23/8
34/1 101/25 126/9
139/22
Arbuthnot [6] 105/5
105/6 105/9 106/18
124/7 129/2
Arch [1] 12/12
architect [1] 44/15
archiving [2] 69/2 70/7
are [75] 3/9 10/5 14/9
14/12 15/6 23/2 23/24
24/1 24/25 29/4 33/17
36/21 37/21 38/14
38/24 41/11 43/2 45/4
48/10 51/6 51/21 52/4
53/12 56/16 58/16
59/21 60/7 61/23 64/3
71/7 71/23 73/10 73/13
77/22 78/11 80/25
83/11 84/13 89/5 90/25
91/7 92/4 92/20 98/18
101/8 104/13 104/23
106/4 106/13 107/4
112/11 115/22 116/23
117/6 122/11 134/3
138/7 143/2 143/2
143/15 144/11 144/18

## A

are... [13] 146/17
149/16 149/17 151/24 152/22 165/10 171/4
171/7 172/3 172/14
172/21 173/4 173/10
area [3] 36/6 82/5 154/18
areas [4] 36/21 37/19 145/10 154/21
arguably [2] 115/16 116/14
argue [1] 143/25
argument [1] 143/20 arguments [2] 142/13 168/24
arise [4] 8/10 68/24
95/19 134/17
arisen [8] 19/19 24/19
29/10 68/14 68/24
82/14 131/7 155/21
arises [2] 13/15 170/2 arising [5] 21/6 120/21 140/12 146/18 164/17
arose [8] 25/3 66/18
67/12 69/9 74/21 82/23 82/24 164/3
around [8] 35/16 50/13 52/5 53/6 54/17 54/23 63/14 170/4
ARQ [2] 51/6 51/9
arranged [1] 170/21
arrangements [3]
14/22 89/23 92/9
arrived [1] 114/7
article [2] 103/1 140/1 as [266]
ascertaining [2] 21/14 79/12
aside [1] 171/14
ask [14] 7/19 7/22
18/24 21/1 23/7 25/22
67/15 113/15 133/5
140/23 165/1 172/11
172/11 172/17
asked [17] 14/8 14/12
14/21 34/2 51/24 52/23
59/9 71/6 82/2 85/9
106/16 115/5 116/6
140/3 148/21 157/12
172/16
asking [3] 65/1 80/21

173/15
asks [1] 165/11
aspect [1] 140/14
aspects [4] 98/24 99/3
112/11 162/11
aspects' [1] 160/15
asserted [2] 53/7 168/16
assertion [7] 53/19 55/12 56/23 57/3 127/9 attributed [2] 66/4 127/14 127/25
assertions [1] 108/4
assess [3] 3/20 13/13
90/9
assessing [1] 81/17
assessment [3] 2/8
8/20 10/7
assessors [1] 1/8
asset [1] 22/10
assigned [1] 26/16
assigning [1] 25/21
assist [4] $1 / 227 / 14$
15/20 115/16
assistance [18] 14/6
14/9 14/14 14/16 14/18
14/19 14/22 14/24
15/17 16/2 17/7 17/15 21/9 22/16 22/22 32/15 76/7 155/11
assistants [4] 5/1 5/16 14/15 99/14
assisting [2] 81/4 155/20
associated [5] 23/17
42/12 123/10 123/13 134/25
assumed [2] 76/18
80/19
assumption [2] 83/16
87/24
assurances [3] 129/21
151/11 151/24
astonishing [1] 166/6
Atkinson [1] 90/8
ATMs [1] 130/23
attachments [1]
154/19
attempt [1] 68/2
attempted [2] 68/4
68/7
attempting [1] 166/2
attended [4] 11/22

65/9 114/9 167/18
attending [1] $2 / 17$
attention [7] $3 / 25$
24/13 29/8 39/17 52/17
82/22 143/14
attesting [1] 114/24
attitude [1] 90/21
attract [2] 26/21
124/23

156/14
audit [12] 23/8 24/2
37/11 38/15 40/12
53/14 86/16 89/24
123/8 131/9 134/16
153/10
auditing [1] 87/5
auditors [1] 86/20
audits [13] 15/12
53/16 72/16 82/21
82/23 86/21 86/22 87/2
87/12 87/13 88/7 88/22
89/13
August [9] 7/6 7/9
53/1 98/22 103/9
111/24 123/17 137/8
137/11
August 1999 [1] 7/9
August 2010 [1] 103/9
author [3] 57/12 133/8

## 141/22

author's [1] 29/22
authored [1] 23/9
authorisation [1]
71/17
authorised [5] 27/16
27/16 28/7 44/13 153/8
authors [9] 109/19
146/1 148/14 150/21
154/3 154/16 155/18
156/18 156/23
automatic [1] 38/14
availability [1] 22/22
available [24] 4/5 10/9 13/23 14/6 14/14 14/18 14/19 15/19 15/25
18/21 22/16 23/5 27/17
40/11 46/21 82/1
104/19 107/16 110/19
119/17 120/13 121/20
131/9 154/14
avoid [5] 27/22 28/13

33/15 120/5 161/3
avoided [3] 50/2
130/16 160/1
awaiting [1] 150/2
aware [13] 24/23 40/1
69/20 93/12 104/13
110/9 114/17 121/8
132/22 156/18 165/10
166/15 169/13
awareness [1] 5/12
away [1] 1/23

## B

BA [2] 139/5 139/6
back [16] 34/12 55/10
56/1 64/14 64/17 67/23 67/24 81/8 85/3 85/7
86/7 102/24 124/6 124/21 128/9 168/11
back-end [1] 67/23
backdrop [2] 90/25 122/3
background [3] 37/9

## 37/11 163/13

backlog [1] 25/9
backups [1] 53/23
bad [1] 165/22
BAE [1] 121/14
Baker [3] 24/18 24/21 25/10
Baker's [1] 24/15
balance [11] 12/2 25/7
25/12 67/9 68/1 68/4
69/16 69/23 75/9 77/20 86/12
balanced [1] 67/1 balances [10] 35/1 53/16 110/11 128/7 131/22 151/13 156/1 156/5 156/11 156/14 balancing [19] 4/4 6/1 6/2 7/2 7/21 7/25 11/17 23/5 23/18 23/21 24/18 24/24 30/12 61/16 62/12 63/5 151/22 153/2 153/15
ballantj1759 [1] 29/21
Ballantyne [2] 29/13 29/15
Bank [2] 128/5 156/3
bankrupt [1] 56/8
Barnard [4] 84/20

84/22 85/9 85/14
barrister [4] 101/18
105/1 112/25 137/6
barristers [3] 97/19 144/17 164/5
based [7] 11/16 11/20
60/1 108/4 129/20
132/14 158/20
baseline [3] 1/15 2/8 13/9
basic [2] 19/12 83/19
basis [22] 38/10 49/13
53/7 57/6 72/24 74/1
74/3 78/20 88/3 98/14
107/22 121/11 147/3
150/8 150/11 150/17
150/21 151/1 151/9
154/17 154/25 158/12
baskets [1] 153/9
Bates [7] 91/17 105/9
162/7 162/16 163/6
163/10 167/8
be [248]
bear [1] 58/20
became [10] 6/2 20/23
21/25 35/2 48/4 69/20
112/23 113/1 118/13 119/2
because [37] 6/2 9/3
22/6 24/19 25/19 45/23
47/15 47/18 49/25
54/23 55/22 58/23
66/25 67/9 68/6 70/23
85/9 85/21 89/5 103/21
104/3 107/11 116/17
142/20 147/15 148/9
148/9 154/2 157/17
159/7 161/3 161/12
164/24 165/12 167/21
171/7 171/12
become [6] 29/18
49/16 105/15 112/12
120/9 138/16
bedrock [1] 91/9
been [123] 5/6 6/12
15/18 18/5 19/3 28/11
28/12 30/1 30/15 34/5
35/7 35/16 36/15 39/5
40/6 41/8 42/16 50/2
50/7 51/13 52/3 53/8
56/13 56/24 57/3 58/9
59/3 62/4 62/10 62/11

| B | behave [1] 140/25 | bla | 94/15 94/24 95/10 96/4 | 35/15 35/18 58/24 61/1 |
| :---: | :---: | :---: | :---: | :---: |
| been... [93] 62/12 | behaved [1] 104/16 | blatant [2] 155/18 | 96/6 96/7 96/9 103 |  |
| 62/14 65/6 65/11 66/1 | behaviour [3] | 165/23 | 103/21 104/10 121/20 | /15 |
| 69/3 71/19 75/12 78/9 | 121/24 151/8 | block [3] 13/20 33/22 | 121/23 123/12 128/9 | /16 66 |
| 8/12 79/8 79/10 79/1 | being [49] 12/23 26/19 | 65/15 | 131/23 132/1 132/10 | 68/18 68/22 70/5 109/7 |
|  | 31/14 35/14 39/4 39/10 | blow [1] 93/11 | 132/16 133/11 151/6 | bugs [60] 15/10 17/3 |
| 84/8 84/25 85/7 86/4 | 42/10 42/18 45/24 46/3 | blunt [1] 144/9 | 151/13 156/13 | 20/11 30/23 32/13 |
| 87/25 88/17 88/18 | 47/21 48/17 48/23 | board [6] 52/10 122/23 | branch's [3] 67/20 | 32/20 34/23 35/1 35/2 |
| 5 | 48/25 50/9 50/21 52/16 | 149/13 149/18 167/18 | 94/3 95/14 | 36/3 42/20 46/19 57/23 |
| 100/18 101/3 103/13 | 53/4 54/8 66/7 68/21 | 168/21 | branches [36] 7/14 | 57/24 58/5 58/7 58 |
| 106/16 106/17 106/19 | 70/6 78/11 83/5 85/22 | bodies [2] 58/20 59/18 | 45/8 45/14 47/22 50/20 | 58/21 58/23 59/2 59/6 |
| 108/22 109/16 1 | 87/17 95/11 98/22 | body [4] 28/18 32/11 | 60/17 62/6 62/21 63/19 | 59/14 59/20 59/24 60 |
| 112/24 113/7 113/7 | 102/7 110/11 116/15 | 32/18 100/2 | 65/14 66/24 69/5 70/3 | 60/6 60/9 60/15 60 |
| 3/12 114/17 114/23 | 118/14 119/4 122/25 | Bond [5] 162/8 162/9 | 73/6 77/17 77/21 87/13 | 60/22 60/25 61/2 62/2 |
| 116/18 116/25 117/7 | 126/2 128/11 128/22 | 162/20 164/1 164/14 | 88/11 94/13 95/24 | 70/10 70/12 70/17 |
| 117/8 117/25 119/5 | 129/10 129/14 129/15 | Bond Dickinson [1] | 107/4 109/1 109/4 | 93/24 94/7 94/11 94/ |
| 19/7 119/9 119/13 | 130/17 137/15 139/16 | 162/9 | 109/6 110/11 123/6 | 94/19 94/21 95/12 |
| 121/15 121/24 125/1 | 145/24 146/23 147/22 | both [34] 1/8 3/23 | 125/1 128/8 133/24 | 95/25 96/15 96/19 |
| 125/20 128/9 129/4 | 149/14 163/2 165/6 | 36/21 42/24 43/9 52/21 | 145/21 151/8 151/8 | 101/15 110/10 113 |
| 129/7 129/8 131/22 | belief [2] 34/9 57/10 | 59/22 60/22 67/8 70/18 | 152/21 152/24 156/8 | 114/14 114/17 114/ |
| 131/25 132/1 133/3 | believe [3] 53/15 75/25 | 88/21 93/5 94/22 95/6 | 156/15 | 114/21 115/2 116/25 |
| 133/11 134/9 134/19 | 165/24 | 95/15 95/21 114/13 | breach [3] 116/2 | $117 / 9$ 117/15 120/2 |
| 137/21 137/21 138/18 | believed [2] 103/23 | 120/16 135/23 139/20 | 116/20 120/1 | 51/2 152/22 |
| / | 12 | 140/24 142/21 142/2 | breaches [1] 120 | build [5] 61/21 |
| 45/15 146/8 146/14 | believing [1] 149/7 | 143/2 143/2 143/3 | break [7] 42/22 47/1 | 61/25 62/10 63/9 |
| 148/20 149/12 149/20 | Bencher [1] 141/25 | 143/17 144/10 144/14 | 47/1 47/9 99/17 136/14 | building [1] 33/22 |
| 150/11 150/22 151/2 | benchmark [1] 9/4 | 146/10 151/21 158/4 | 136/23 | dds [1] 163/1 |
| 152/9 153/19 153/23 | neft [4] | 160/12 163/5 | breakdown [1] 136/9 | built [1] 2/4 |
| 155/6 155/9 155/25 | 48/10 172/23 172 | bottom [6] 2/13 34/14 | Brian [4] 34/2 85/12 | t [2] 22/13 38 |
| 156/25 158/10 159/2 | benefited [1] 109/17 | 38/23 88/18 128/16 | 102/5 137/1 | lied [1] 14 |
| 161/15 | best [1] 166/2 |  | [1] | bundle [1] 173/8 |
| BEER [11] 1/3 1/9 5/9 | better [1] 109/16 | bound | Briefing [1] | dened [1] 28/2 |
| 47/3 70/21 170/24 | between [24] 9/9 | brackets [2] 75/9 | briefly [10] 16/21 | bureau [1] 88/14 |
| 171/3 171/25 173/12 | 11/19 11/20 18/10 34/1 | 117/4 | 27/23 31/6 59/8 66/20 | Burley [1] 50/14 |
| 173/22 175/2 | 43/8 45/15 67/7 70/20 | Bracknell [3] 127/2 | 2/16 86/16 90/23 | business [26] $2 / 16$ |
| before [32] 5/14 16/22 | 71/4 76/8 77/20 82/14 | 127/22 132/5 | 92/24 149/24 | 15/1 18/3 24/3 26/5 |
| 24/13 24/21 28/11 | 86/12 93/3 97/24 104/1 | branch [82] 12/5 12/7 | bring [11] 2/10 4/6 | 26/9 38/7 41/8 |
| 28/12 39/8 42/13 42/22 | 114/15 117/25 118/11 | 26/5 26/19 44/25 45/11 | 29/11 37/6 52/16 62/3 | 41/11 41/20 41/21 |
| 65/6 65/23 69/10 70/21 | 130/2 130/5 130/9 | 45/17 45/19 46/5 48/7 | 63/20 91/23 118/7 | 41/23 44/15 46/22 |
| 80/15 82/23 84/19 85/7 | 136/10 | 48/11 48/13 48/21 49/8 | 150/11 167/13 | 122/9 125/8 128/5 |
| 86/3 100/9 100/15 | beyond [4] 15/3 60/13 | 51/20 52/23 53/6 53/15 | broad [1] 15/8 | 30/10 130/14 135/19 |
| 100/19 103/13 112/9 | 115/22 162/16 | 53/25 54/2 54/5 54/16 | broader [2] 138/1 | 136/6 149/4 154/22 |
| 117/19 123/22 123/23 | BI2 [1] 39/2 | 54/20 54/25 58/2 62/5 | 165/1 | 170/9 |
| 125/24 142/11 162/13 | bias [5] 165/13 166/14 | 62/18 65/10 67/9 69/12 | broadly [3] 90/ | but [63] |
| 6/21 170/18 172/12 | 6/15 168/12 169/4 | 69/23 7 | 136/15 164/22 | 4/22 15/3 2 |
| begin [2] 99/19 137/8 | biased [2] 166/18 | 74/22 75/6 75/8 75/15 | brought [11 | 26/4 26/7 26/9 26/18 |
| beginning [1] 142/13 |  | 79/14 81/13 81/16 | 971713 111/22 | 27/14 42/14 47/21 |
| [1] $88 / 6$ | biggest [1] 49/3 | 83/4 83/6 83/23 84/3 | 147/12 150/19 153/17 | 8/18 50/17 55/1 58/21 |
| begun [1] 98/8 ${ }^{\text {behalf [6] }} 52 / 1257 / 16$ | BIMS [1] 41/10 | 0 | Bruce [1] 7/5 | 65/6 |
| behalf [6] 52/12 57/16 $90 / 19$ 102/13 144/22 | bit [1] 133/19 | 84/25 85/5 85/9 85/21 | BSC [1] 18/4 | 70/25 |
| 90/19 102/13 144/22 | blamed [1] 108/10 | 85/23 87/5 88/4 93/7 | bug [20] 35/2 35/3 | 79/5 80/15 82/19 91/25 |

## B

but... [29] 95/5 96/18 100/19 100/24 101/15 103/18 108/11 116/1 116/25 119/25 132/12 134/6 137/14 137/17 138/4 138/10 139/21 160/8 162/13 163/7 164/17 165/24 167/15 168/11 168/22 171/3 171/14 172/14 173/18 button [1] 78/25 by [248]

## C

cabling [1] 65/12
call [24] 13/2 17/22
23/23 24/4 25/21 28/13
30/20 33/11 40/9 58/25 65/24 69/14 105/11 118/12 118/23 119/1 119/6 140/21 145/4 154/7 154/9 154/12 165/22 170/19
called [29] 18/2 19/4 19/11 20/19 32/24 33/1 36/23 40/4 42/9 45/10 47/16 55/15 55/16 61/10 65/4 70/15 80/25 98/16 105/16 107/10 116/10 118/19 121/16 126/13 130/13 130/21 143/12 159/19 162/9
Callendar [3] 35/3 35/15 61/1
calls [14] 12/4 25/10 25/18 26/3 26/23 27/7 27/18 28/21 29/5 33/5 62/14 119/20 120/11 154/6
came [5] 54/16 69/15 73/19 107/8 124/7
Camelot [7] 47/21
47/22 48/9 48/12 48/20 77/8 83/25
campaign [1] 91/18 campaigned [1] 91/17 can [137] 1/5 1/14 2/10 2/13 3/3 4/5 4/6 5/5 6/5 6/6 6/14 7/3 7/10 9/6 9/6 9/24 10/7 10/21 11/7 12/17 14/25 18/15

18/24 19/4 20/19 21/3 21/11 21/25 23/7 23/9 23/11 23/12 24/13 25/15 25/23 25/25 27/1 27/23 29/8 29/10 29/12 29/13 30/4 30/18 31/5 31/6 31/11 32/19 32/21 33/3 33/23 33/23 34/9 35/9 35/13 36/5 36/14 37/5 37/6 37/15 38/5 40/14 40/15 41/2 42/1 42/14 42/22 46/11 47/11 47/14 48/5 49/3 49/14 53/3 54/9 54/9 54/15 55/1 55/9 57/23 59/8 59/11 62/3 62/6 63/10 63/20 63/21 64/20 66/3 66/15 67/2 68/18 71/4 73/6 73/7 73/21 75/2 76/18 77/3 79/2 82/12 82/15 83/2 84/19 84/22 85/8 85/12 85/20 86/1 87/6 88/5 89/2 102/24 112/20 115/3 118/17 118/18 118/22 121/12 121/13 123/2 128/13 128/15 129/18 134/20 135/10 135/13 148/18 156/14 162/1 165/23 171/2 172/2 172/7 172/19 172/24 172/25
can't [4] 1/4 14/4 55/1 109/12
cancel [3] 67/18 67/19 68/2
cancelled [1] 67/10 cancelling [1] 68/8 cannot [2] 64/15 104/18
capability [3] 31/21
151/22 153/8
capable [2] 57/7 94/12
capacity [1] 23/1
capital [2] 25/17 25/17
captured [2] 59/21
80/13
care [2] 7/19 32/18
careful [1] 36/21
carefully [3] 17/8 23/3
37/14
carried [19] 2/3 2/7

19/10 48/3 48/14 49/1 52/20 82/12 86/4 86/22

158/10 158/24 159/6 160/13 173/2
cash [18] 6/8 6/10 6/12
6/19 23/18 43/21 44/3
44/20 45/16 45/19
45/20 67/4 67/7 74/17
78/2 87/10 88/16 132/2
Castleton [5] 56/2
56/4 56/5 56/6 56/8
casts [1] 115/12
catalyst [1] 91/11
catastrophe [1] 135/4
categories [1] 126/22
category [2] 26/16
26/20
cause [17] 26/7 55/13 58/1 58/1 60/17 62/8
64/15 65/13 66/3 66/7
68/22 94/13 94/23
111/4 145/23 159/14 166/25
caused [13] 47/19
55/21 58/24 65/15 69/2 70/6 80/1 95/14 95/25
108/8 145/20 152/23 169/8
causes [6] 41/15 41/16
63/25 64/3 95/23
155/12
causing [2] 38/19
94/12
caution [2] 139/8
140/7
caveats [1] 16/8
CCRC [8] 99/16 100/1
100/2 146/24 153/19
157/18 160/14 161/11
cease [4] 26/7 44/9
163/2 166/19
censure [1] 165/19
cent [2] 10/14 155/5
central [11] 6/21 15/7
15/9 19/23 20/5 32/12
45/5 59/7 71/18 118/4 121/22
centralised [1] 33/10
centrally [18] 17/2
44/4 44/9 72/12 74/7 74/16 74/24 75/12 79/1 79/6 80/1 80/4 81/24 118/9 118/15 119/4 120/12 128/7
centrally' [2] 75/5 75/7 centre [9] 6/6 18/3
19/15 19/23 24/3 27/24
31/7 31/24 76/5
CEO [1] 125/12
certain [7] 53/10 66/18
90/11 98/24 113/4 132/22 147/19
certainly [1] 85/4
cetera [1] 70/23
chain [2] $85 / 885 / 12$
chair [1] 112/8
chaired [1] 152/14
chairman [4] 102/13
144/23 152/13 162/23
chalked [1] 48/23
challenge [3] 23/20
78/23 81/19
challenges [4] 53/2
103/10 121/17 129/6
challenging [3] 46/23
73/19 90/17
Chambers [3] 35/15 40/6 167/4
chance [1] 77/1
change [15] 14/19
16/3 22/6 36/23 40/2
45/23 46/3 46/16 46/18
49/4 69/2 69/4 104/22
108/21 165/20
changed [3] 11/11
80/12 131/22
changes [12] 7/2 8/25
9/23 20/10 22/18 43/10
43/12 108/18 122/3
130/10 163/12 170/12
channels [1] $82 / 19$
character [2] 149/4
159/8
characterise [1] 143/7
charge [12] 143/5
144/17 147/12 147/15
147/15 147/19 149/3
150/5 150/10 150/12
150/19 157/22
charged [7] 56/14
57/14 76/7 143/25
144/11 147/22 158/11
charges [4] 144/11
157/24 158/22 159/18
charging [4] 102/10
142/8 142/15 158/18

## C

check [1] 48/19
checks [1] 37/21
chief [1] 111/16
child [1] 61/13
children [2] 61/12 61/13
choices [1] 44/7
choose [1] 75/7
chose [2] 62/21
140/20
Chris [2] 12/13 34/21
Christopher [2]
102/12 145/3
chronologically [2]
90/14 136/16
Cipione [2] 28/20 28/23
circulate [1] 125/24
circulated [2] 54/8
141/7
circulation [1] 4/20
circumstances [14]
30/25 46/18 57/22 66/2
66/18 71/16 100/14
135/5 135/10 144/2
145/14 150/14 151/6 153/5
cited [1] 149/15
civil [9] 15/13 58/11
58/19 59/25 73/23
89/14 92/6 101/5
160/13
CK [2] 113/12 113/13
claim [5] 55/23 92/11 92/19 165/12 166/20
claimants [15] 94/22
95/2 95/12 97/12 97/19
97/25 98/4 98/18
159/22 160/1 160/13
160/23 163/6 165/19
166/1
claimants' [2] 95/8 165/22
claimed [6] 72/1 88/14
94/6 97/22 98/1 98/6
claims [13] 58/11
91/23 91/24 92/2 92/6
92/8 92/10 92/14 97/12
97/12 99/6 164/3
164/16
Clarke [22] 101/17

101/18 105/1 112/20 112/25 113/2 113/18 114/2 114/5 114/11 114/12 114/22 115/4 115/20 118/3 118/13 118/17 119/21 120/3 120/10 137/10 140/24
Clarke's [1] 121/8 classroom [4] 4/3 11/16 11/20 11/22
classroom-based [2] 11/16 11/20
clause [1] 97/15
clause 2.1 [1] $97 / 15$ clear [16] 32/9 45/9 76/14 80/5 82/17 96/16 97/8 104/9 105/15 112/23 119/24 134/16 148/19 165/13 166/25 171/16
cleared [1] 124/5 clearly [7] 15/2 15/8 17/1 104/18 104/23 119/21 173/12
Clevelleys [1] 55/17
client [3] 77/23 127/5 128/4
client's [1] 80/20
clients [5] 77/20 80/18
144/18 156/3 170/21
closed [3] 39/4 65/6 131/23
Coates [1] 12/12
code [3] 73/13 148/6 158/20
codes [1] 120/3
coding [1] 20/10
coherent [1] 18/13
coincidence [1]
131/12
Colin [1] 24/15
collaboratively [1]
111/19
collation [1] 120/19
colleagues [2] 50/11
51/18
collect [2] 13/12 62/19
collected [3] 8/12 8/17
9/19
collection [1] 8/10
collectively [3] 41/24
60/23 70/18
colouring [1] 70/23 combination [1] 110/14
come [18] 25/15 27/1
32/21 35/9 40/15 42/1
43/1 44/10 49/20 55/9
73/21 73/22 82/21
96/22 104/2 104/24
121/12 141/21
comes [1] 16/8
comfort [1] 142/5
coming [3] 48/8 89/6 124/21
commenced [2] 109/25 126/24
commencement [1] 91/11
commented [3] 51/18 56/9 141/7
comments [6] 56/20
134/6 134/8 135/16
159/2 165/25
commercial [1] 52/19
commission [2] 152/3 156/10
commissioned [1]
121/24
commitment [2] 24/10
128/20
commitments [1]
99/12
committed [1] 144/7
committee [3] 125/9
125/10 125/14
common [10] 54/3
74/12 83/19 92/5 92/21
93/1 161/7 165/16
166/4 168/10
commonly [2] 130/21
130/22
communicated [6]
51/13 52/14 68/17 83/1
83/6 142/23
communication [1]
52/2
communications [2]
110/15 124/17
compare [1] 48/8
comparing [1] 80/17
compelling [1] 169/15
compensation [9]
89/21 90/22 91/18

97/25 98/5 98/9 98/17 98/19 158/19
competence [15] 2/17
3/15 3/19 10/2 10/4
10/6 10/10 10/15 10/17
10/19 10/21 10/24 13/13 15/11 89/24
competences [2] $2 / 8$ 13/9
competencies [2] 1/16
2/25
competent [1] 13/18
compiled [1] 53/4
complain [1] 65/5
complained [2] 63/16
69/21
complaint [6] 65/6
89/19 111/25 124/12
145/14 154/15
complaints [12] 83/9
102/15 109/22 120/20
126/5 131/15 145/8
145/14 153/23 154/9
154/11 155/2
complete [8] 25/5
108/14 110/17 111/19
126/22 126/25 130/1
171/5
completed [7] 2/9
10/15 62/2 101/25
112/22 126/8 162/2
completing [1] 24/20
completion [1] 6/19
compliance [1] 122/1
compliant [1] 22/7
complied [1] 115/8
comply [1] 115/21
comprised [1] 61/10
comprising [1] 112/5
computer [4] 47/20
56/17 57/8 102/25
ComTEst [1] 64/12
concentrated [1]
145/10
concept [1] 122/17
Conceptual [2] 44/21
45/12
concern [13] 55/13
65/13 79/10 79/21
79/22 87/20 88/2
105/23 110/25 119/21
122/12 139/11 165/21
concerned [12] 7/11
35/15 41/13 61/23
68/20 105/2 113/1
135/9 140/14 155/24
159/9 173/4
concerning [10] 40/8 101/22 102/14 113/5 114/14 $142 / 7$ 149/20 153/14 154/23 156/25
concerns [24] 2/16
3/25 4/2 4/3 7/20 9/19
22/24 37/3 39/14 59/14
62/4 98/21 103/3
104/16 105/17 106/5
106/12 112/2 114/13
126/14 130/4 151/3
156/25 165/14
concession [2] 161/15 161/17
conclude [6] 108/11
127/9 127/15 129/18 150/17 166/17
concluded [10] 1/12
69/1 96/13 104/15
132/14 141/8 141/16
151/19 157/4 157/19
concluding [1] 109/12
conclusion [13] 63/24
109/9 115/1 118/11
118/25 120/22 146/15
146/20 146/25 147/2
147/3 147/7 168/13
conclusions [12]
71/14 94/20 106/7
110/2 110/4 114/7
115/4 128/13 128/17
128/18 133/17 143/16
conduct [17] 73/13
89/19 94/10 96/25
105/3 107/15 113/1
113/2 120/3 126/11
131/10 131/11 142/3
144/11 146/22 149/21
165/22
conducted [9] 53/16
88/23 107/10 113/11
113/14 121/23 144/22
146/14 157/20
conducting [3] 43/25
71/10 138/15
conference [11]
118/11 118/23 119/1

## C

conference... [8] 119/6 119/20 120/11 162/22 165/17 167/24 168/3 168/23
conferences [1]
164/11
confessions [1] 149/9 confidence [2] 55/8 160/12
confident [1] 171/5 confidential [2] 87/4 128/23
confined [2] 59/11 138/24
confirm [3] 152/4 152/21 153/4
confirmed [1] 114/18 confirming [1] 126/15 confiscation [1]
158/19
conflict [3] 12/18
12/20 138/2
conformance [2] $2 / 21$ 121/16
conjunction [1] 17/16 connected [1] 61/13 connection [1] 49/8 conscience [2] 100/12 100/23
consent [1] 96/8 consequences [1] 128/22
consequently [2] 62/11 101/1
consider [92] 3/18
5/22 7/20 7/23 14/21
14/24 15/8 15/22 16/17 17/8 17/14 18/22 26/14 26/24 27/19 31/3 32/17 33/18 37/14 40/10 43/2 43/9 43/13 46/15 46/17 48/19 49/19 49/21
52/15 55/7 57/5 57/13
57/20 58/22 59/2 59/9
59/19 59/25 60/11
60/21 62/23 63/7 64/15
66/11 66/13 68/16 70/5
70/16 71/7 71/21 72/2
73/23 73/24 74/6 76/23
76/25 81/2 82/6 82/15
83/8 85/24 86/8 86/17

86/24 87/11 88/22 106/4 146/17 162/5 164/19
111/21 117/13 118/2 contentious [1] 6/2 129/20 131/17 137/18 contents [2] 103/25 137/23 142/1 145/7 121/9
148/21 152/3 152/18 context [6] 67/13
152/25 154/13 158/21 80/25 87/14 123/25 162/5 162/17 162/24 163/9 164/19 164/22 165/4 165/5 166/12 170/8
considerable [5] 129/7 137/3 139/8 140/7 146/7 consideration [2]
36/22 160/19
considerations [2]
71/15 158/24
considered [26] 14/5 14/5 14/23 22/7 47/17
72/20 92/25 93/23
100/6 100/13 101/22
102/3 107/11 115/23
126/20 130/6 134/11
138/17 138/20 146/10
148/7 150/20 151/16
155/4 155/5 166/17
considering [1]
156/16
considers [1] 100/4 consistency [1] 47/24 consistent [2] 151/11 152/1
consists [1] 41/5
conspiracy [1] 120/6
constituents' [1] 103/3
constituted [1] 100/19 construed [1] $97 / 9$ consultation [1] 139/2 contact [5] 19/8 21/5 76/1 83/2 85/21
contain [2] 61/11
106/10
contained [5] 27/15
57/11 119/23 141/20
152/6
contains [1] 4/8
contemplation [1]
48/3
contemporaneous [1] 132/23
content [8] 3/7 4/2
11/7 13/11 104/24

160/22 161/9 163/11
Cook [2] 2/11 2/20
cooperation [1] 136/9
copied [1] 40/6
copy [3] 109/24 138/17 173/3
Corbett [1] 44/15
core [8] 27/25 58/15
71/24 72/21 97/2
170/17 170/20 171/3
correct [10] 36/15
48/17 64/10 79/13
108/16 110/13 131/8
149/17 149/17 168/9
correcting [1] 36/18
correction [20] 36/19
72/25 75/25 77/24
78/19 79/18 80/6 80/21
81/6 81/9 81/11 81/12
81/15 81/17 82/6 82/11
83/16 84/6 84/9 103/21
corrections [22] 47/24
48/10 48/16 49/2 71/9
71/23 72/13 77/3 77/4
77/13 77/17 78/5 78/7
78/8 78/23 79/23 80/12
83/24 84/11 86/10
111/10 111/12
correctly [1] 25/5
corroboration [1]
65/20
corrupt [1] 53/17
corrupted [2] 36/15
68/9
corruption [1] 30/14
cost [1] 107/12
costs [4] 97/18 97/21
97/22 98/3
could [55] 5/1 8/19
8/24 10/22 10/23 19/19 25/22 26/21 28/2 31/7 35/10 37/2 37/2 40/21
42/3 50/2 55/20 64/14
65/15 66/21 67/17
67/18 67/25 70/15
70/21 76/10 77/6 77/10
81/7 81/23 83/2 87/14
100/10 110/16 110/21
111/7 113/24 119/25 127/8 129/10 130/16
133/17 135/5 136/14 139/1 145/7 147/21

150/6 150/13 151/13 154/19 160/5 167/20 171/16 172/15
couldn't [1] 19/13 Coulson [1] 169/16 council [1] 24/16 counsel [20] 90/8 102/6 120/2 136/17 137/2 137/7 137/16 138/6 141/14 141/15 141/23 145/2 145/3 150/5 150/14 153/13 164/4 164/4 166/10 172/24
countenance [1] 173/15
counter [10] 5/1 5/15
6/25 29/25 30/12 30/20
67/5 108/4 133/10
145/22
counterclaims [1]
164/15
counterfeits [1] 73/11 counterpart [1] 51/25 counters [7] 6/21 6/22
25/1 37/23 38/2 39/2
67/4
country [1] 92/7
couple [1] 3/12
courier [1] 173/9
course [69] 1/17 2/23
3/175/13 5/14 5/22
6/16 8/2 8/6 8/11 8/17
9/15 10/22 13/6 14/4
16/9 16/17 17/5 20/21
22/11 23/4 26/24 33/3
33/18 34/22 35/19
42/19 42/24 49/4 54/3
58/12 58/19 61/3 65/20
66/8 68/13 70/2 70/13
71/20 75/1 79/5 82/4
82/21 85/16 86/18
89/10 92/16 97/1 99/19
101/8 102/23 104/7
105/15 108/24 113/15
114/19 120/7 121/7
127/14 136/18 138/11
142/10 148/11 154/5 156/20 161/24 163/17 165/1 169/1
courses [4] 8/13 11/4 11/8 11/11

## C

court [22] 55/14 100/3
100/5 100/9 100/12
100/13 100/15 100/20 100/23 112/7 114/9 115/9 115/19 117/12 117/23 137/4 138/19 139/23 141/24 145/2 160/19 167/3
court's [1] 158/22 courts [1] 58/19 cover [11] 1/14 4/7 4/13 5/23 14/2 15/4 19/21 20/7 20/12 66/20 85/4
coverage [1] 53/9 covered [6] 3/17 4/2 5/12 73/13 87/20 107/14
covering [1] 89/8 covers [1] 16/1
CPS [1] 149/23
create [1] 153/9
created [4] 29/13
68/10 104/23 111/25
creates [1] 61/14
creation [2] 111/14 111/18
credibility [2] 116/4 157/1
credit [3] 84/7 84/8
156/1
credited [1] 128/9 Crichton [1] 122/1 crime [2] 109/21 120/6 criminal [30] 15/13 58/19 59/25 89/14 90/24 99/16 100/1 100/3 100/3 101/5 102/18 112/24 114/9 114/23 126/23 137/5 138/24 139/19 145/10 145/16 146/19 149/22 150/4 152/7 153/17 157/14 158/16 160/13 161/4 161/9
criteria [1] 138/12
critical [15] 12/14
26/16 52/13 92/20
94/10 101/15 102/1
106/19 126/10 131/9 133/8 155/10 160/7

163/15 169/19
Critically [1] 53/21
criticise [1] 164/24 criticised [2] 18/6 122/16
criticism [3] 78/19 149/14 149/19
criticisms [1] 119/23
critics [1] 56/19
cross [6] 20/16 122/14
133/1 140/22 154/8 154/11
cross-examination [1] 140/22
cross-reference [5]
20/16 122/14 133/1
154/8 154/11
crown [4] 92/1 141/24
148/6 158/20
cryptographic [1] 38/7
CS [1] 31/9
culpability [1] 58/18
culture [1] 121/5
currency [1] 130/23
current [18] 14/21
34/3 38/9 39/1 68/24
69/11 71/22 78/22 90/1
113/6 116/6 116/8
117/6 132/14 137/12
137/13 170/5 170/7
customer [6] 21/15
31/11 31/24 40/1 75/13
75/14
customers [1] 21/21
cut [1] 90/15
CV [1] 141/21
CWU00000002 [1]
111/17
cycle [1] 34/19


D'Alvarez [2] 50/4 50/10
daily [1] 41/6
damages [3] 97/21
164/17 168/18
damning [1] 129/23
Darlington [1] 56/20
data [72] 20/2 20/3
30/13 31/1 33/10 36/15
37/3 37/24 38/6 38/6
38/7 38/20 40/24 48/8

48/13 48/22 49/7 52/24 debate [3] 2/15 135/15 53/24 55/8 55/12 58/10 135/21
60/1 60/18 61/3 61/6 debit [1] 84/9
61/9 61/10 61/11 61/15 debt [27] 44/25 45/2
61/19 61/21 61/22 $\quad 45 / 445 / 545 / 675 / 15$
61/24 61/25 62/2 62/10
75/18 75/20 76/12
62/17 63/2 63/4 63/8
68/6 74/1 74/3 77/23
80/17 80/19 80/20 94/4
94/4 95/19 95/19 95/20
96/4 96/4 96/6 96/6
96/7 100/18 104/18
104/20 121/19 121/23
127/22 128/3 129/9
132/1 132/2 132/10
139/25 151/9 153/16
data-driven [1] 151/9
database [4] 27/13
27/20 32/6 39/23
databases [2] 49/9
54/5
dataset [1] 152/23
date [1] 17/25
dated [9] 2/11 7/6
11/14 23/8 24/17 51/1
97/7 157/13 159/23
daughter [1] 56/5
Dave [1] 52/24
David [1] 44/15
Davies [2] 124/17 124/24
day [18] $5 / 155 / 15$
11/17 12/2 12/6 23/19
25/6 25/10 50/8 50/22
69/11 111/13 125/24
126/1 156/20 166/21
172/22 174/3
days [13] $5 / 1411 / 16$
11/20 11/21 11/25 12/1
50/14 80/3 108/19
172/12 172/22 173/10
173/10
deadline [1] 112/10
deal [10] 23/6 36/8
60/2 81/16 83/11 89/4
89/7 131/1 132/24
154/4
dealing [1] 111/9
dealt [10] 59/22 60/20
70/4 83/5 106/20
107/19 107/21 111/12
123/4 149/24

143/20
defendant [1] 148/4 defendants [7] 100/10 113/9 116/19 116/24 117/1 117/9 153/16 defensible [2] 143/9 143/15
deference [1] 80/22
deficiencies [2] 6/17
8/22
deficiency [3] 8/24 9/1
48/1
define [2] 18/10 39/1
defined [3] 38/6 97/13
106/1
defining [1] 90/17
definition [4] 3/13 3/15
19/1 20/15
definitive [1] 24/25
definitively [1] 154/4
degree [2] 45/7 134/13
delay [9] 79/3 79/8
79/11 79/15 80/2 80/3
161/3 166/25 169/9
delayed [2] 29/1 80/9
delaying [1] 79/3
delays [5] 79/1 98/23
129/7 163/11 163/11
delete [3] 96/3 153/9
153/15
deleted [4] 69/5 69/8
69/15 161/16
deliberate [2] 79/2
157/22
delineate [1] 59/8
deliver [1] 66/19
delivered [5] 13/5
16/19 18/13 99/11
169/17
delivery [2] 3/10 9/5
Deloitte [4] 151/18
151/20 152/5 153/13
demanding [1] 93/17
demonstrable [1]
168/12
demonstrate [1]
134/18
demonstrated [3]
132/6 144/6 169/4
demonstrates [1]
30/22
denied [5] 103/22

| D | 76/15 124/16 | 111/11 129/5 130/7 | discrepancy [26] 31/2 | DMB [1] 73/12 |
| :---: | :---: | :---: | :---: | :---: |
| denied... [4] 125/12 | 10/4 |  | 35/13 41/14 44/762/4 | 7 |
| 132/9 133/3 152/9 |  | difficultie | 62/23 66/19 67/7 67 | 7 |
| department [3] 76/2 | 99/6 162/3 | $21 / 24124$ | 67/16 67/17 67/20 68/5 | 55/1 56/17 59/2 5 |
| 136/6 170/9 | determined [2] 45/17 | difficulty [2] 122/ | 68/6 68/9 74/16 74/21 | 60/2 67/25 70/21 7 |
|  | 169/8 | 126/19 | 76/1 76/11 76/22 77/2 | 8/886/6 89/9 119/19 |
| depending [1] 11/2 |  | digital | 77/11 79/6 80/7 82/ | 143/18 143 |
| depends [1] 144/1 |  | dip [1] 138/10 | 88/3 | 8/16 148/23 152/2 |
| depleted [1] 35/12 | ca [3] 121 | direct [3] 48/9 54 | discretion [1] 81/20 | 4/21 158/12 164/2 |
| deployed [3] 7/14 |  |  | discuss [1] 162/1 | 166/ |
| 8/12 134/5 | 1] 34/3 | di | discussed [2] 61 | ument [55] 2/1 4/7 |
| describe [3] 36/17 |  |  | dis | 4/13 4/22 5/6 6/14 |
|  | 49/11 49/15 | director [6] 7/5 44/1 | dis | 19/5 19/6 |
| described [23] | 25/9 38/9 44/17 |  | 105/8 |  |
| 15/5 22/19 24/14 28/3 | developing [2] 2/15 | disagree [2] 81/11 | dishonestly [1] 161/16 | 32/21 34/12 35/9 36/14 |
| 31/13 35/16 36/2 36/24 | 21/23 | 164/25 | dishonesty [3] 142/21 | 36/17 37/7 37/10 37/10 |
|  | development [6] $2 / 25$ | disagreed [1] 148/14 | 143/3 143/18 | 37/13 37/16 38/21 |
| 64/19 80/2 93/20 135/5 | 20/9 46/10 48/5 98/17 | disclosable [3] 119/16 | dismissed [1] 55/19 | 39/13 39/15 40/15 |
|  | 125/5 | 120/9 152/6 | disparities [1] 45/24 | 41/25 44/23 45/1 |
| describes [6] | devise [1] 138/12 | disclose [5] | display [2] 137/14 | 54/10 73/21 77/16 78/4 |
| 21/4 23/14 31/10 31/19 | devised [1] 25/8 | 15/14 115/25 11 | 16 | 8/21 80/5 8 |
|  | diagnosis [1] 21/17 | 117/8 | displayed [3] 21/1 | /23 121/6 126/13 |
|  | diagno | disclose | 39 | 8/15 129/13 137 |
|  | diagnosticians | 2511 | dispute [25] | 145/4 168 |
|  | 38/10 | 116/18 116/19 116/25 | 46/2 46/16 72/19 75/10 | document's [1] 75/3 |
| n 9 ] | Dickinson [5] 162/9 | 117/20 117/24 120/2 | 5/17 75/22 76/20 | mentation [11] |
| $39 / 123$ | 162/9 162/21 164/1 | 153/16 | 7/11 78/13 7 | 11/8 15/16 15 |
| 61/2 | 164/14 | disclosure [22] 89/1 | 79/17 80/6 80/9 80/15 | 15/24 15/25 16/19 |
| designed [7] 11/9 |  | 100/16 100/21 112/23 | /11 82/13 | 21/2 |
| 20/15 28/18 36/17 | dictated [1] 83/20 | 113/7 113/10 117/2 | 82/16 82/17 82/18 | documented [3] 27/1 |
| 42/16 43/4 108/13 | did [32] 1/20 6/18 | 117/7 117/9 119/17 | 82/25 83/15 86/9 | 77/13 |
| designs [2] 11/4 20/13 | 13/11 13/12 13/13 | 120/5 121/7 137/ | disputed [8] 43/18 | documents [24] 4/23 |
| desk [6] 19/11 20/23 | 13/19 14/18 25/5 26/7 | 145/18 146/18 147/1 | 71/11 71/17 74/18 | 8/13 11/3 16/3 16/6 |
| 20/25 21/25 22/4 27/3 | 26/9 28/8 28/24 44/5 | 147/4 148/23 153/18 | 76/10 81/6 111/11 | 6/10 16/13 18/20 |
| despite [4] 14/3 | 49/24 55/22 58/1 68/24 | 161/10 161/12 164/13 | 127/5 | 36/24 89/7 102/2 10 |
| 130/18 147/22 149/14 | 70/16 70/17 80/20 | discontent [1] 122/4 | disputes [11] 15/12 | /16 126/20 12 |
| destroyed [3] 78/13 | 94/13 94/18 101/14 | discontinue [1] 141/17 | 43/7 60/11 70/20 71 | /10 129/15 147/19 |
| 119/9 121/4 | 121/9 132/15 140/5 | discounted [1] 54/23 | 72/4 74/20 76/8 82/2 | 151/20 173/1 173/3 |
| ction [1] | 141/18 154/16 156/23 | discouraged [1] 75/21 | 99/7 130/2 | 173/7 |
| (ail [4] 16/14 123/24 | 156/24 162/7 165/19 | discovered [1] 158 | disputin | does [9] 30/3 30/7 |
| [2 155/5 | didn't [3] 127/12 | discrepancies [36] | 22 71/25 72/14 | 56/23 57/2 11 |
| detailed [6] 51/19 91/2 | 139/21 172/1 | 23/6 43/22 43/22 45/4 | 77/2 78/18 78/22 | /18 144/9 172/7 |
| 109/8 121/23 127/3 | differ [1] 48/10 | 20 46/2 4617 | disruption [2] 31/2 | n't [5] 3/12 3 |
|  | difference [3] 44/8 | 46/23 58/1 58/25 60/17 | 169/9 | /25 88/16 120/2 |
| details [3] 21/14 88/7 | 44/9 130/19 | 61/6 62/6 62/12 | disseminated [3] | ng [4] 117/1 |
|  | different [7] 6/9 | 63/9 69/6 70 | /10 118/15 11 | /10 162/4 169/18 |
| detect [1] 64/11 | 13/15 41/16 94/14 | 71/23 72/22 75/22 | distribute [1] 38/4 | main [2] 21 |
| detected [3] 40/ | 11 133/16 | 23 75/25 77/6 77/22 | distributed [1] 15/ |  |
| $67 / 15140 / 11$ | differently [1] 70/22 | 84/21 86/9 87/21 94/23 | divided [1] 14/25 | n't [6] 19/21 |
| detecting [1] 62/11 determination [2] | differing [1] $83 / 11$ difficult [6] 46/2 64/21 | $\begin{aligned} & 131 / 2152 / 23156 / 7 \\ & 156 / 13 \end{aligned}$ | division [3] 20/4 100/3 109/19 | $\begin{aligned} & \text { 171/18 171/21 172/17 } \\ & 172 / 18 \end{aligned}$ |


| D |
| :--- |
| done [10] 46/5 49/9 |
| $51 / 2096 / 111103 / 13$ |
| $108 / 11110 / 4149 / 8$ |
| $154 / 19169 / 3$ |
| doors' [1] 53/24 |
| double [1] 123/11 |
| doubt [4] 24/23 101/7 |

duplicate [3] 33/16
51/16 51/20
duplicated [3] 51/5
51/5 51/10
duplicates [1] 51/21
duplicating [1] 51/2
duplication [2] 28/14 33/15
during [31] 4/1 11/6 13/7 15/21 16/14 18/16 20/6 21/17 22/25 37/14 egregious [1] 100/22 56/6 60/3 60/6 71/8 77/22 86/18 91/15 93/13 95/15 104/7 106/12 106/15 108/24 110/15 114/19 131/14 135/20 138/23 142/10 154/5 160/9
duties [3] 115/8
120/25 152/7
duty [12] 93/5 115/13 115/14 115/15 115/17 115/22 116/2 116/20 118/19 119/24 120/16 168/20
DVLA [1] 128/6
DWP [1] 128/6

## E

each [14] 25/21 27/6
60/25 61/13 67/10 86/13 90/16 92/11 92/25 107/19 107/21 107/24 154/4 158/3 earlier [13] 33/7 35/22 70/8 108/22 117/24 131/8 134/8 135/23 136/20 140/5 141/6 160/24 162/25
early [4] 43/25 103/6 108/1 132/25
earmarked [1] 97/18 easy [2] 10/24 134/16 eaten [2] 84/8 84/8 Edge [1] $56 / 12$ edit [2] 37/2 96/3 edited [1] 161/16 effect [12] 3/1 43/11 45/22 46/15 62/19 67/21 116/15 120/22 121/9 144/10 147/13 163/6
effective [4] 31/4
68/16 107/12 111/2
effectively [4] 27/19
88/23 149/1 150/23
effectiveness [2] $3 / 8$ 8/20
effects [1] 115/23
efficacy [2] 33/8 33/12
efficient [2] 107/12
141/11
eight [6] 11/24 103/14 117/19 139/22 157/16 167/8
eight years [2] 117/19 139/22
eight-page [1] 167/8 eighth [1] 102/21
either [9] 11/24 17/15
44/2 78/1 106/17
118/14 119/3 134/22
164/25
elaborated [1] 45/10
elected [1] 79/25
electronics [1] 65/16
element [1] 21/23
eligible [1] 98/19
email [21] 33/24 34/1
34/3 34/14 35/14 40/5
50/5 50/10 54/10 54/22
84/1 84/19 84/22 85/8
85/14 85/18 104/8
104/10 126/25 172/10 172/20
emailed [1] 119/7
emails [5] 104/1
104/25 119/8 127/19 132/23
emerge [1] 111/23 emerged [1] 154/6 emergency [1] 42/18 emerges [1] 163/22 emerging [5] 125/3 136/7 162/12 162/19 163/8
emphasised [3]
120/15 120/18 124/18 employee [3] 50/25 54/7 104/4
employees [6] 50/6 72/6 92/1 127/1 132/22 154/13
employer [1] 116/15
enable [6] $8 / 2313 / 4$
32/7 45/6 46/4 147/16
enabled [1] 77/1
encompass [1] 134/6
encountered [2] 25/2
118/8
encourage [2] 157/24
158/13
encouraged [1]
160/14
end [16] 11/18 44/7
45/14 46/23 67/23
72/12 74/11 74/15 79/6
85/3 97/7 111/7 117/17
124/16 141/20 161/13
ended [2] 65/25
142/12
endorse [2] 173/12 173/22
Energy [2] 136/6 170/9
enforceability [1] 93/1
enforced [1] 43/6
enforcing [1] 158/17
engaged [3] 42/1
75/18 105/6
engagement [1] 89/24
engaging [1] 138/6
engineer [4] 65/9
65/18 65/21 66/9
engineers [1] 65/11
England [1] 137/6
English [2] 75/3
137/20
enhancements [1] 134/9
enlarge [1] $37 / 8$
enough [3] 2/18 45/9
172/1
enquire [1] 109/21
enquiries [3] 71/14
86/8 91/10
ensued [1] 65/24
ensure [5] 10/14 47/24
55/25 143/8 172/9
ensured [1] 49/19
enter [4] 54/20 54/24
55/4 69/17
entered [4] 64/18
131/22 159/21 161/16
entered/edited/deleted
[1] 161/16
entire [1] 59/1
entirely [2] 78/15 173/22
entirety [1] 74/5
entitled [16] 44/20
44/23 53/2 77/16 93/6
103/10 105/22 113/20
117/1 123/4 137/13 139/14 141/4 155/1 157/14 167/8
entries [1] 161/15
entry [7] 2/16 53/24
54/16 62/8 63/21 95/19
123/11
environment [4] 6/18
38/5 45/6 122/12
environmental [2]
64/11 65/13
equal [3] 6/8 143/2 148/2
Equally [1] 20/17
equip [1] 6/18
equipment [2] 65/14
123/10
equipped [1] $1 / 11$
erroneous [2] 64/23
66/6
erroneously [1] 69/17
error [21] 24/19 27/12
29/25 30/13 35/3 41/7
41/12 41/16 48/24
55/21 64/9 64/14 64/15
64/16 66/2 66/3 78/24
87/18 130/14 133/6
134/14
errors [58] 15/10 17/3
20/2 20/2 20/11 30/23
32/13 32/20 34/24
35/24 36/3 38/18 40/23
41/6 42/21 43/5 46/19
47/15 48/7 57/23 57/24
58/5 58/7 58/13 58/23
59/6 59/14 59/20 59/24
60/3 60/19 60/22 70/12
70/17 87/17 87/25
93/24 94/7 94/11 94/19
94/21 95/12 95/18
95/25 96/15 96/19
123/15 130/15 131/7
131/8 133/9 133/11
133/14 134/17 145/22
145/24 155/12 168/10

## E

Escher [3] 33/23 34/3 34/6
Escher-Dev [1] 34/3 especially [2] 23/25 59/4
essence [2] 6/24 68/22 essential [2] 100/18 168/15
essentially [1] 138/3
establish [7] 2/24 42/4
45/5 117/21 121/3 150/15 153/20
established [3] 94/14 98/12 112/6
estate [2] 31/17 37/13
estimate [1] 171/19
estimates [1] 171/8
et [1] 70/23
et cetera [1] 70/23
evaluated [1] $3 / 8$
evaluating [1] 72/7
even [8] 78/24 83/18
86/3 87/24 133/10 133/12 165/23 167/1
event [8] 5/12 26/18
29/25 30/11 30/15
30/21 97/21 171/10
eventing [1] 30/20
events [10] 2/18 19/18
29/9 68/15 90/16
110/15 122/20 123/21 123/24 164/13
eventually [4] 7/18 25/11 48/4 91/24
every [2] 4/13 78/24
everybody [1] 47/5
evidence [118] 1/24
2/23 3/22 4/17 8/2 8/5
8/11 9/21 10/18 11/4 12/11 12/18 15/24
16/15 17/6 17/19 17/23 18/6 18/7 20/6 23/1
25/16 33/11 35/2 35/14 37/1 39/11 41/10 41/19 42/2 42/23 45/22 49/17 50/1 55/2 55/5 56/5
57/18 59/12 59/23 60/5
61/2 63/6 68/13 70/1
70/3 70/12 72/3 72/5
73/18 74/19 74/25 75/1
76/25 78/12 81/7 81/13

82/1 82/3 82/9 83/4 exercise [7] 48/15 83/8 83/13 85/2 85/16 86/18 86/21 88/20 89/11 91/4 92/11 94/14 94/16 95/3 97/4 98/14 104/20 106/7 106/15 108/6 110/6 112/14 113/21 114/9 116/6 116/11 117/16 124/21 127/23 131/13 132/5 132/14 132/21 135/24 136/2 140/12 140/19 141/9 142/16 146/3 147/10 147/21 148/7 148/13 148/22 151/16 154/14 157/23 158/2 158/3 158/8 158/10 159/13 160/16 164/9 169/6 172/13 172/23 evidential [3] 148/25 150/11 150/17
evolve [1] 66/9 evolved [1] 134/4 exacerbated [1] 145/24
exactly [1] 144/13
examination [1] 140/22
examine [13] 11/7 13/22 18/15 23/4 41/2 42/19 58/12 99/10 103/7 107/13 111/20 112/16 141/21
examined [2] 170/1 170/1
examining [2] 57/15 170/7
example [19] 18/24 20/14 24/14 27/14 30/1 30/2 48/18 65/2 67/2 69/22 73/5 74/22 77/15 83/21 87/3 130/23 147/4 148/3 164/14 examples [2] 37/5 114/10
exceptions [1] 34/21 excess [2] 88/9 88/12 exchange [1] 34/1 executive [6] 24/16 53/11 87/8 102/23 111/16 122/23
executives [1] 90/20

68/16 113/11 113/12
113/16 146/8 148/20
exercised [1] 141/9
exercising [1] 140/6
exhaustive [1] $4 / 11$
exist [1] 152/2
existed [6] 42/9 68/21
73/1 83/17 84/21 128/7
existence [8] 94/19
108/25 113/8 116/25
117/8 117/15 151/22
158/9
existing [2] 45/18 85/10
expanded [1] 171/19
expect [3] 12/18 164/6 171/21
expected [5] 5/2 21/21
26/25 27/2 48/12
experience [2] 55/6 134/10
experience' [1] 135/9
experienced [7] 13/24
14/17 19/3 79/8 86/20
110/20 126/19
experiences [2] 16/16 170/11
expert [19] 90/8
101/21 104/5 106/13
113/21 114/5 114/22 115/10 115/11 116/1 116/2 116/5 116/6 116/9 116/12 117/16 140/16 141/12 163/17
expertise [4] 31/24
31/25 57/16 149/22 experts [1] 114/8 expired [1] 112/10 explain [3] 36/2 104/24 156/12 explained [12] 33/2 50/20 76/4 77/19 80/16 114/2 119/25 124/3 126/17 127/8 127/20 168/5
explaining [1] 16/24
explains [1] 37/9
explanation [2] 17/4 64/17
explicit [2] 68/11 79/21
exploited [2] 39/4
39/10
explore [1] 9/18 exploring [1] 54/17 exposes [1] 38/15 expressed [5] 98/21 104/16 114/25 155/17 159/4
expressing [1] 122/12 expression [1] 73/14 extends [1] 115/15 extensive [4] 15/16 16/1 17/10 53/18
extent [22] 3/9 9/23
13/22 16/18 40/10 60/6 66/11 96/14 99/11
99/12 112/16 113/15
118/14 119/3 122/25
137/23 156/14 157/6
161/19 162/6 164/20
169/24
external [7] 22/14
64/11 89/23 136/15
141/15 153/13 158/4
extra [1] 29/1
extreme [1] 26/18
extremely [6] 40/4
48/16 49/1 50/12 84/13
155/14
eyes [2] 65/23 66/10

## F

face [1] 168/16
faced [4] 18/16 44/7
124/24 134/24
facilitate [1] 45/18
facilities [1] 45/19
facility [4] 44/1 96/3 110/24 132/5
facing [2] 23/16 124/8 fact [23] 12/17 13/5
16/19 23/18 28/24 36/4 41/14 47/19 48/22 54/4 55/7 56/20 58/7 63/15 79/12 88/24 92/5 93/25 94/12 115/13 144/3 165/18 166/20
factor [2] 55/14 108/15 factors [5] 43/10 55/11 71/13 126/4 159/7 facts [3] 144/6 150/16 166/17
factual [1] 93/18
fail [2] 21/19 110/22
failed [6] 6/25 62/16 62/19 104/9 115/21 115/25
failing [4] 62/10
108/15 111/4 120/25
failings [1] 139/23
failure [18] 28/20 50/7
61/3 61/6 61/24 61/25
63/3 110/15 115/23
116/2 116/13 116/15
116/18 116/23 117/15
123/1 126/5 139/24
failures [6] 50/1 89/15
100/15 100/21 135/1
136/13
fair [12] 5/20 10/6
71/25 82/8 83/10 86/10
86/24 91/18 93/9
100/11 100/17 166/16
fairly [1] 88/23
fairness [1] 121/1
faith [2] 93/5 124/15
Falkirk [1] 35/3
fall [2] 120/24 127/12
false [24] 56/13 74/1
102/10 142/8 142/17
142/19 142/25 143/5
143/17 143/23 144/5
144/10 144/12 144/18
147/14 147/18 148/1
149/6 149/8 150/6
150/7 155/19 157/25
158/14
familiar [2] 29/19
138/7
family [1] $84 / 16$
Fantastic [1] 171/23
fantastically [1]
125/20
far [7] 25/2 110/6
112/14 122/20 148/20
151/4 172/14
fast [1] 107/15
fatally [1] 116/5
fault [5] 6/12 31/3 31/3
42/2 160/3
faults [1] 30/16
faulty [4] 56/25 57/4
64/5 64/7
favour [3] 55/16 93/10

| F | 123/23 154/23 | fit | fo | 100/7 100/14 102/19 |
| :---: | :---: | :---: | :---: | :---: |
| favour... [1] 168/24 | finally [5] 72/15 99/4 101/25 126/8 170/4 | fitted [1] 65/12 <br> five [4] 11/19 11/20 | 80/8 136/8 144/22 formal [2] 76/16 | $\begin{aligned} & \text { 163/14 166/13 } \\ & 169 / 11 \end{aligned}$ |
| fear [2] 165/25 173/20 | 101/25 126/8 170/4 <br> finance [1] 44/14 | five [4] 11/19 11/20 $11 / 24114 / 10$ | $\begin{aligned} & \text { formal [2] 76/16 } \\ & 164 / 10 \end{aligned}$ | Fraser's [6] 26/1 |
| $48 / 3$ | finances [1] 51/19 | fix [8] 34/17 39/3 42/12 | formas [1] 172/21 | 3/16 94/9 161/9 |
|  | financial [10] 38/17 | 47/16 47/17 47/25 48/4 | formation [1] 91/12 | 65/14 |
| feature [1] 59/6 | 45/2 71/15 77/25 87/6 | 0/6 | formed [2] 93/4 102 | fraud [6] |
| February [8] 29/1 | 99/14 122/8 122/1 | fixed [1] 34 | former [3] 112/7 145 | 103/20 121 |
|  | 159/13 168/14 | fixes [5] 42/7 42/1 | 167/3 | 158/11 |
| 125/9 144/24 152/12 | find [3] 40/5 59/20 | 42/17 42/18 96/5 | former's [1] | Freeman [1] 135 |
| February 2007 [1] | 147/21 | flavour [1] 70/ | formerly [2] 137/5 | quent [1] 37/20 |
| 84/2 | finding [5] | flawed [1] 135 |  | quently [3] 16/3 |
| February 2016 [1] | 112/13 112/16 133/13 | flaws [4] 135/24 136/2 | forming [1] | 09/9 |
| 152/12 |  |  |  | iday [2] 171/6 |
| fed [2] 15/11 16 | findings [15] | focal [1] 143/13 | formulation [1] |  |
| Federation [1] 125/15 | 3/2 3/18 8/7 13/4 26/22 | focus [1] 162/13 | forum [3] 42/10 42/16 | from [144] |
| feed [4] 1/10 8/19 48/9 | 59/10 59/17 63/13 91/7 | focused [5] 20/2 27/10 | 110/23 | 4/6 5/6 6/9 7/4 7/10 8 |
| 48/12 | 93/16 117/23 122/10 | 56/19 134/4 151/5 | forward [4] 111/22 | 10 8/16 11/15 |
|  | 152/17 | follow [7] 12/2 12/4 | 120/11 134/20 170/2 | 11/23 12/3 12/11 1 |
| 8/12 8/16 8/17 8/19 9/2 | fine [5] 5/9 47/3 47/7 | 50/10 53/12 64/9 75/1 | forwarded [2] 103/4 | 13/2 13/15 16/15 |
| 16 9/18 9/22 13/12 | 136/21 172/5 | 108/16 | 119/12 | 21/15 25/1 25/4 26/5 |
| 4 134/10 | finish [1] 170/18 | follow-up [1] | forwards [3] 23/11 | 28/20 29/1 29/12 29 |
|  | firm [5] 73/17 91/23 | followed [10] 11/16 | 32/2 107/9 | 30/23 34/6 34/17 35/5 |
| 2/3 138/12 | 105/7 162/10 168/13 | 11/17 11/25 19/3 29/22 | found [33] 14/9 33/4 | 35/14 35/18 36/1 36/12 |
|  | firmly [2] 48/4 73/3 | 102/17 107/7 121/19 | 34/25 35/18 42/2 43/23 | 36/18 37/18 39/15 40/5 |
|  | first [64] 1/14 4/1 7/19 | 122/24 125/7 | 54/15 55/15 58/5 60/16 | 43/18 48/5 48/8 48/9 |
| [2] 126/22 157/19 | 10/22 11/15 19/7 20/22 | following [28] 6/13 | 62/20 63/5 69/4 70/3 | 48/13 49/5 49/10 50 |
| felt [5] 76/21 79/13 | 20/24 21/23 22/13 | 11/1 12/9 38/16 38/24 | 74/11 77/22 88/12 | 53/13 54/3 55/2 55/5 |
| 79/23 86/19 149/5 | 22/20 24/21 26/25 27/2 | 39/12 39/15 54/18 69/9 | 88/19 94/11 94/13 | 55/24 56/5 57/12 57/17 |
| few [6] 29/19 50/14 | 27/18 27/20 27/25 28/2 | 74/13 88/7 93/12 94/20 | 94/19 95/22 96/15 | 61/17 61/22 62/17 |
| 107/8 10 | 30/19 32/7 32/23 34/3 | 100/7 104/11 105/5 | 100/20 110/6 112/14 | 62/22 63/17 63/24 67/5 |
|  | 34/12 38/22 49/16 | 105/8 105/20 115/24 | 124/21 129/13 131/5 | 6 |
| field [4] $7 / 1317 / 19$ | 55/17 59/14 66/17 | 118/25 119/4 134/10 | 135/24 156/9 157/15 | 70/11 72/5 73/14 75 |
| $0 \text { 166/3 }$ | 69/20 72/9 72/17 79/4 | 146/20 150/9 157/12 | 158/8 | 75/19 75/21 76/18 |
| fifth [4] 72/15 | 80/16 82/15 82/25 87/8 | 165/17 166/4 174/3 | foundational [1] 32/15 | 79/25 80/5 80/24 81/13 |
| $102 / 5111 / 2$ | 87/10 90/23 91/6 91/14 | follows [12] 11/13 | founded [3] 53/22 | 84/23 87/9 87/10 87/11 |
|  | 91/14 94/2 94/20 95/22 | 101/8 106/3 110/4 | 154/15 165/2 | 90/3 90/3 90/4 90/4 |
| figure [5] 30/2 30 | 100/10 101/19 103/16 | 111/16 115/20 142/24 | four [9] 1/13 19/22 | 90/5 90/5 90/5 90 |
| figure [5] 30/2 30 30/7 30/8 88/16 | 110/6 114/1 123/5 | 143/16 151/19 154/10 | 61/2 63/25 64/3 70/10 | 90/7 91/1 101/17 102/5 |
|  | 123/16 124/2 126/22 | 159/24 168/3 | 108/7 108/12 145/10 | 102/11 102/17 102/21 |
| 3] | 130/4 137/7 141/23 | Fontaine [1] 92/1 | fourth [16] 9/25 20/9 | 104/10 105/23 109/8 |
|  | 143/17 145/2 145/10 | foot [8] 23/10 29/24 | 29/14 34/5 41/25 42/5 | 109/17 111/15 111/23 |
|  | 145/16 151/21 152/18 | 39/19 62/7 63/21 73/8 | 72/14 94/4 95/13 | 120/21 121/7 121/12 |
| $\begin{aligned} & \text { tiles [9] } \\ & 127 / 7127 / 12138126 \end{aligned}$ | 154/10 159/7 | 87/9 88/5 | 101/24 110/20 139/5 | 2/13 124/2 128 |
| $17 \text { 148/12 } 154$ | firstly [14] 3/13 8/18 | footnote [1] 141/22 | 139/7 144/3 145/13 | 0/19 131/14 132/23 |
| 154/14 | 10/3 16/8 16/21 33/9 | footnoted [1] 115/18 | 153/12 | 134/4 135/10 136/16 |
| filter [5] | 37/5 61/6 67/20 78/6 | force [1] 143/15 | Fraser [27] 34/25 | 37/1 139/5 140 |
| 28/21 28 | 93/24 101/9 109/2 | forcing [1] 130/7 | 18 39/18 47/18 | 40/24 143/7 |
| filtered [1] 60/12 | 150/4 | foreign [1] 130/23 | /25 54/4 58/5 60/4 | 6/1 150/5 151 |
|  | fit [2] 122/111 133/21 | forensic [4] 101/13 | 62/20 63/5 63/13 7011 | 151/12 153/4 153 |
| final [7] 7/24 34/21 | fitness [2] 133/7 | 103/23 105/7 156/11 | 74/12 91/7 92/15 92/17 | 154/12 155/6 155/22 |
| 97/11 98/13 123/22 | 133/15 | forgot [1] 67/5 | 93/9 93/14 95/8 95/2 | 157/11 158/17 161/ |


| F | 57/12 60/9 68/14 69/4 | 120/5 154/20 170/6 | 139/ | 59/14 73/17 89/20 91/5 |
| :---: | :---: | :---: | :---: | :---: |
| from... [12] 162/20 | 6/9 | G | 2/22 165/6 166/21 | /6s |
| 162/24 163/25 164/11 | /25 96/25 97/3 104 | gain [7] 54/21 55 | 167/24 169/24 171/9 | 8/18 99/2 102/22 |
|  | 113/22 116/14 120/20 | 67/8 67/10 69/9 75/6 | gives [4] 30/1 70/13 | 12/5 114/3 125/23 |
|  | 127/2 127/22 132/6 | 75/8 | 172/12 172/22 | 126/1 133/4 139/17 |
| /20 | 132/15 132/22 151/12 | gains [4] 66/22 67 | giving [3] 60/10 | 0/20 152/10 152/ |
| ontline [1] 17/2 | 151/23 151/25 153/9 | 68/23 69/7 | 104/20 106/6 | 57/18 159/22 161/25 |
| strated [1] 78/10 | 163/21 165/7 170/8 | Gareth [14] | GLO [5] 92/4 92/4 | 62/10 164/2 164/10 |
| FUJ00001276 [1] 1/19 | Fujitsu's [8] 15/11 | 51/18 57/12 101/20 | 92/13 162/13 164/1 | 165/9 |
| FUJ00001627 [1] | 19/9 20/23 21/7 41/2 |  | go [13] 15/3 16/12 | groups [1] 14/2 |
| 40/22 | 70/2 153/15 | 1414 | 23/13 32 | wing [1] 165/21 |
| FUJ000020 | Fuj |  | 33/24 34/7 40/7 73/23 | guidance [9] 31/25 |
| 49/14 | 132 | gatekeepe | 128/16 133/19 134/20 | 74/23 75/2 75/11 75 |
| FUJ00079425 [1] 42/5 | fulfil [1] 116/12 | 21/8 24/4 | goes [7] 2/20 25/10 | 76/9 76/24 77/9 81/2 |
| FUJ00079853 [1] | full [12] 20/20 34/ |  | 30/15 36/17 40/3 42/1 | guide [8] 4/15 4/16 |
| 20/20 | 60/3 85/23 86/7 97/11 | gather [1] 81/7 | 65/17 | 4/20 4/22 4/24 5/19 |
| FUJ0007 | 109/23 134/14 148/2 | gathering [2] 83/13 | going [18] 3/22 10/12 | 33/2 58/17 |
| 8/2 | 153/1 153/7 15 |  | 16/11 16/23 19/6 2 | guides [1] 17 |
| FUJ00079926 [1 | fully [6] 22/7 62/10 | gave [6] | 27/13 29/18 37/5 37/13 | guilty [13] 56/13 56/21 |
| FUJ00080027 [ | 97/3 120/25 133/9 | 138/14 142/6 148/2 | 72/8 77/14 88/6 92/18 | 56/24 57/3 142/17 |
| 20/16 | 134/11 |  | 105/11 122/22 145/4 | 147/14 147/17 1 |
| FUJ00080455 [1] 22 | function[5] 6/21 83/3 | general [11] 36/2 | 172/3 | 149/2 149/6 |
| FUJ000804 | 111/3 160/8 160/9 |  | go | 57/24 158/13 |
| 2/19 | functionality [2] 48 |  | good [18] | Guy [1] 52/7 |
| FUJ00080489 [2] 2 |  | $156$ | /22 73/2 74/16\| | H |
| FUJ00082401 [1] 65 | functioning [2] 10/23 | generally [2] 15/14 | /2 79/6 88/15 93/5 | had [204] |
| FUJ00082401 [1] 65 FUJ00083596 [1] | $57 / 8$ | 25/14 | 93/19 130/8 141/16 | hadn't [1] 153/19 |
| 00083596 [ | fun | generated [7] 30/1 | 159/8 | half [3] 5/15 85/3 |
| $000$ | 20/25 123/7 141/10 | 30/11 30/16 45/16 51/9 | got [1] 172/2 | 156/20 |
| 46/12 | fundamental [4] 23/16 | 54/18 98/1 | governance [2] 89/22 | milton [3] 117/19 |
| FUJ00086553 [1] 62 | 16 140/11 |  |  |  |
| FUJ00086682 [1] | fundamentally [4] | generous [1] 47/6 | vernment [3] 90/5 | hand [2] 57/9 170/12 |
| 63/20 | 140 |  | 90/19 136/5 |  |
| FUJ00088036 [1] 37/6 |  |  |  | 1/16 41/20 72/5 |
| FUJ00089756 [1] | funding [3] 97/21 98/3 | $\begin{aligned} & \text { George } \\ & 135 / 20 \end{aligned}$ | $68 / 41$ | ndler [1] 154/7 |
| 39/17 | further [42] 11/17 12/1 | get[3] 88/17 167/15 | 168/16 168/21 168/23 | handlers [2] 154/9 |
| FUJ00091215 [1] 48/6 | 27/16 42/7 45/10 50/23 | 173/20 |  | 154/12 |
| FUJ00097046 [2] | 51/8 61/13 65/19 6 | getting [1] 171/19 | grant [1] 139/24 | handling [5] 101/1 |
| 0097058 | 76/25 79/15 80/1 81/21 | give [13] 4/25 5/20 | grapple [1] 3/12 | 146/18 147/1 156/1 |
| FUJ00098168 [1] | 84/18 85/7 85/20 86/21 | 17/23 18/20 36/21 37/5 | grateful [1] 170/24 | 5/15 |
| Fujitsu [64] 1/18 15 | 88/20 93/8 98/17 99/8 | 47/1 51/22 81/21 | 37/8 81/1 | Handwritten [1] |
| 16/23 16/24 17/1 18/7 | 100/25 101/3 102/24 | 110/16 1 | 4 89/7 132/24 | 9/1 |
| 18/9 18/15 20/18 26/16 | 111/24 112/3 117/6 | 11 | 154/18 164/8 | happened [6] 50/3 |
| 26/21 37/2 38/15 39/8 | 120/8 120/15 124/23 |  | greater [2] 46/4 143/1 |  |
| 40/11 41/22 44/18 46/9 | /17 127/23 132/13 <br> /7 151/1 157/11 | $\begin{aligned} & 1838 / 1252 / 7 \\ & 1771 / 2584 / 1 \end{aligned}$ |  | happens [1] 75 |
| 49/10 50/6 50/23 50/25 | 145/7 151/1 $157 / 11$ 161/6 161/18 165/8 | 2/16 | $100 / 10137 / 251$ | $\text { happy [2] } 54 / 13$ |
| $\begin{aligned} & 51 / 1752 / 1252 / 15 \\ & 52 / 1854 / 454 / 1554 / 19 \end{aligned}$ | 167/2 170/12 <br> future [5] 90/2 116/7 | $\begin{aligned} & \text { 117/18 119/8 119/13 } \\ & 120 / 8 \text { 132/4 139/16 } \end{aligned}$ | 166/14 167/13 group [33] 2/25 3/1 | hard [1] 173/3 <br> harder [1] 155/21 |

## H

hardware [3] 19/21
66/7 134/25
has [50] $1 / 236 / 1211 / 3$ 12/22 12/23 15/16 17/10 17/20 18/5 29/10 30/1 34/21 36/15 37/24 39/5 40/7 62/11 65/18 74/25 75/12 77/25 78/12 84/25 86/4 89/7 90/8 97/23 99/11 104/18 109/14 113/12 115/14 116/9 116/15 117/7 119/5 125/20 129/4 134/19 135/11 139/10 146/17 147/25 148/20 149/1 149/12 149/22 167/14 168/12 173/22
hasn't [1] 5/6
hate [1] 52/9
have [161] $1 / 108 / 2$
12/15 13/3 13/19 15/18 16/15 19/2 22/5 22/13
22/24 23/1 33/21 34/19 39/22 42/16 46/4 47/5 48/9 48/20 48/24 50/2
51/10 51/15 52/9 54/13
55/21 55/22 56/10
56/24 57/3 58/7 58/9
59/3 60/16 60/25 61/13
62/10 62/12 62/14
62/24 64/18 65/11
65/11 66/1 66/3 66/25
70/10 70/17 70/24
71/19 72/3 75/1 75/6
76/4 76/21 77/1 77/3
77/7 78/9 79/8 79/9
79/11 82/2 83/18 83/19
84/1 84/24 85/24 86/17
87/25 88/8 88/17 88/18
89/4 90/11 92/2 94/22
96/15 98/8 98/9 98/15
98/21 99/7 99/15
100/11 100/25 101/3
103/8 103/13 108/23
109/4 109/6 109/15
109/17 113/4 113/7
116/18 116/25 117/1
117/8 119/1 119/9
122/2 122/20 124/5
124/24 126/15 127/22

128/9 129/7 129/8 130/16 131/7 131/17 131/20 131/22 132/4 132/9 132/15 132/16 132/21 133/3 133/11 133/13 134/18 135/15 138/11 138/18 140/4 143/15 145/20 146/4 147/6 147/24 148/7 148/16 148/25 149/5 149/8 152/8 152/9 156/19 158/8 158/9 158/10 159/2 161/4 161/11 161/13 166/1 167/17 167/23 168/4 170/1 170/11 170/20 171/8 171/8 173/5 173/7
haven't [1] 172/13 having [15] 35/16 41/7 56/13 78/1 79/13 81/8 94/16 100/13 104/3 111/15 125/1 134/9 157/3 161/15 166/16 he [81] $1 / 22$ 21/19 26/21 34/8 46/9 46/12 50/20 53/18 53/21 55/11 55/14 55/15 55/16 55/16 56/15 56/22 65/5 65/18 65/22 82/3 85/18 85/19 93/20 94/10 94/13 94/14 94/19 96/13 103/23 104/4 113/8 113/10 114/4 114/8 114/14 114/18 115/5 116/5 116/10 117/4 118/12 118/23 119/22 119/23 119/25 120/15 120/18 124/8 124/15 124/15 124/18 124/24 132/6 137/5 137/15 137/23 138/9 138/14 140/9 140/11 141/4 141/8 141/16 141/18 141/23 143/11 147/25 157/12 157/15 158/1 158/7 158/24 159/4 159/4 159/6 163/15 165/24 166/2 166/20 167/21 172/2
head [4] 52/22 119/12

121/25 167/4
heading [6] 14/10
23/14 29/24 30/10 30/19 75/22
headline [1] 58/9 hear [58] 1/4 1/24 2/23 5/16 8/11 9/20 10/18 16/13 17/5 17/19 18/1 18/7 20/6 20/20 25/16 28/20 32/22 35/2 36/1 37/1 39/11 41/10 41/12 41/17 42/23 43/4 45/22 46/12 47/11 47/16 49/17 50/1 55/2 55/5 57/18 59/12 59/23 60/5 61/2 68/13 70/1 70/3 70/12 72/5 73/17 74/19 82/3 82/9 83/4 85/16 86/21 88/20 90/3 90/7 123/21 157/8 162/10 169/16
heard [18] 3/22 8/2 12/11 16/15 22/24 23/1 33/21 72/3 76/21 77/4 86/18 89/6 91/15 94/14 124/2 131/13 131/14 160/15
hearing [9] 50/5 89/11 92/11 99/8 160/20
165/12 169/7 170/25 174/3
hearings [14] $8 / 58 / 6$ 11/6 12/21 15/22 16/15 20/21 50/5 56/7 59/13 60/3 72/4 86/19 131/14 heart [1] 32/9
heavily [2] 46/10 46/13 held [5] 49/8 85/13 100/15 127/4 127/6 Helen [7] 101/9 103/16 103/17 103/19 112/21 114/12 137/9
help [2] 45/18 109/12 helpdesk [24] 5/17 18/10 19/11 20/22 20/24 21/4 21/13 21/16 21/24 22/7 22/14 22/17 22/25 23/2 23/16 24/4 24/8 25/11 25/18 25/20 27/3 27/11 41/9 65/4 helpful [5] 17/5 60/24 66/24 92/24 147/25
helpline [4] 25/8 69/22 131/3 131/4
helplines [1] 145/13 hence [1] 168/13
Henderson [2] 105/13 125/10
Henry [1] 171/8 her [11] 50/16 51/12 51/24 55/20 72/23 84/4 100/11 104/7 124/3 139/20 139/24 here [6] 26/2 26/12 30/17 61/23 117/8 134/3
hesitation [1] 166/7
HFSO [2] 7/12 7/13
hide [1] 45/24
hierarchical [1] 61/9
high [11] 10/20 44/16
45/7 47/23 48/16 49/1
49/25 134/13 145/2
157/17 161/11
higher [2] 21/8 27/8
highest [1] 34/11
highlight [3] 32/4 37/15 46/8
highlighted [8] 51/14
54/7 55/16 78/7 114/22 126/13 128/4 135/15
highlighting [1] 155/11
highly [8] 32/10 94/10 106/19 108/3 126/10 128/23 133/8 169/19 him [10] $1 / 2456 / 9$ 115/14 116/1 132/7 140/21 140/21 141/7 152/16 159/13
himself [3] 93/15
167/6 167/15
hindsight [1] 148/10
his [50] $1 / 2125 / 10$
26/20 28/23 50/11 55/12 56/5 65/6 65/7 65/10 65/23 72/23 75/1 75/2 85/16 94/20 95/13 96/12 100/11 103/23 108/15 115/4 115/5 115/8 115/11 115/12 115/18 116/1 116/2 116/15 117/16 118/18 120/8 120/22 124/12

124/12 140/8 140/16 143/16 156/25 157/20 158/19 161/10 161/13 167/4 168/5 168/21
168/25 171/20 172/2 historic [3] 98/12 98/19 99/5
Historical [1] 98/10 HMRC [1] 128/6 HNG [8] 49/12 49/16 50/15 51/4 51/10 52/10 54/18 96/18
HNG-X [8] 49/12 49/16 50/15 51/4 51/10 52/10 54/18 96/18
Hobbs [1] 54/6
holding [1] 52/7
holds [1] 105/24
Holmes [2] 23/10 23/14
homework [1] 138/4 Honourable [1] 129/2
Hooper [4] $112 / 7$
143/4 144/14 159/3
hope [3] 3/7 3/11 147/14
Horizon [239] Horizon's [2] 55/12 133/7

## Horizon-related [2]

118/5 118/7
hot [1] 39/3
house [5] 70/24
129/16 141/12 141/14
171/24
housekeeping [3]
170/23 172/7 175/4
how [72] 2/3 2/3 4/21
8/11 10/18 13/8 13/11
13/12 14/20 15/24 16/1
17/23 18/7 18/11 22/15
22/20 23/5 24/11 25/13
26/12 27/19 28/16
28/20 31/3 33/19 34/23
36/3 36/20 39/1 39/7
39/11 40/8 41/19 41/23
42/5 42/7 42/19 43/14
46/17 54/19 55/7 55/20
57/19 60/11 64/20
68/13 68/16 70/4 70/5
72/4 77/22 80/2 81/3
83/4 83/5 83/8 83/12

## H

how... [15] 86/19 86/20 86/22 87/14 131/1 133/5 139/15 144/7 149/10 149/16 155/17 159/1 159/15 162/17 164/12
however [25] 1/22 5/19 6/12 25/2 28/11 38/14 58/11 60/5 63/4 64/24 67/9 70/13 78/18 82/22 89/10 90/23 97/23 115/23 126/17 129/3 133/2 134/7 141/18 151/3 154/5
HSS [1] 98/24
hub [1] 118/4
human [6] 8/4 56/6 72/3 86/18 91/15 131/14
hungry [1] 80/1 hurdle [1] 161/11 hypothetical [2] 69/12 69/23
hypothetically [1] 58/24
I
I address [1] 123/23
I addressed [1] 126/12 I advise [1] 115/24
I am [1] 173/14
I ask [3] 18/24 23/7 25/22
I can [2] 59/8 172/2
I concluded [1] 1/12
I consider [1] 82/15
I deal [1] 36/8
I do [1] 56/17
I don't [2] 19/21 171/18
I draw [2] 24/13 29/8
I endorse [1] 173/22
Ifear [1] 173/20
I feel [1] 138/12
I focus [1] 162/13
I found [2] 54/15 158/8
I have [23] 1/10 12/15 13/3 60/25 70/10 76/4 77/7 84/1 84/24 89/4 96/15 103/8 122/20 131/20 132/4 132/21

135/15 147/24 152/8 156/19 158/9 158/10 170/1
I highlighted [1] 126/13
I hope [2] $3 / 73 / 11$
I identified [1] 13/7
I intended [1] 170/14
I introduce [1] 61/2
I just [5] 5/5 64/14
71/1 139/3 171/15
I know [2] 1/8 104/13
I look [3] 70/22 70/25
170/25
I may [3] 85/24 138/11
143/12
I mean [1] 41/3
I mention [1] 4/23
I mentioned [1] 74/13
I missed [1] 171/25
I must [1] 162/15
I noted [1] 160/24
now [3] 18/15 70/19 103/14
I pause [1] 26/12
I raise [1] 36/10
I raised [2] 162/25
171/12
referred [4] 2/22 5/25
32/24 33/7
I reiterate [1] 18/19
I repeat [2] 70/12
172/8
I report [1] 119/13
I return [1] 121/13
said [1] 24/18
say [1] 170/14
I should [6] 27/1 39/16
90/25 138/13 165/8
173/13
I started [1] 70/25
I take [1] 171/2
think [7] 1/5 6/20
24/17 34/16 37/7 85/20
173/13
I thought [1] 173/17
I trust [1] 170/22
I turn [21] 1/14 27/23
31/6 32/19 36/5 42/22
47/14 49/3 57/23 63/10
66/15 68/18 74/6 77/3
82/12 86/16 89/2 91/6

112/20 136/14 162/14
I understand [1] 119/1
I want [2] 170/3 173/12
I was [3] 1/14 100/1 137/1
I will [16] 14/7 16/4
16/21 20/12 28/17 36/7
42/25 44/10 49/20 65/1
66/20 73/22 83/11
90/13 104/24 137/8
I wish [4] 46/8 81/1 89/1 170/15
I won't [1] 85/8
I wonder [2] 113/24
133/16
I would [6] 3/24 4/18
10/20 13/14 21/1 34/20
I'd [2] 5/7 52/9
I'll [9] 22/2 57/1 69/14
72/15 82/21 90/23
96/22 114/1 124/20
I'm [19] 1/4 1/9 1/22
10/11 16/10 16/23 19/6
20/7 27/13 37/5 54/13
72/8 77/14 99/16
105/11 145/4 170/24
171/2 171/3
I've [14] $1 / 55 / 247 / 16$
10/13 42/25 55/10 72/2
80/16 91/1 104/1
118/24 149/15 163/13
170/16
Ian [2] 105/13 125/10
Ian Henderson [2]
105/13 125/10
ICL [12] 7/6 8/15 9/4
9/9 9/15 9/22 10/11
10/14 10/16 13/20 21/6
64/24
ICL Pathway [4] 8/15
9/9 9/22 64/24
ICL Pathway's [4] 7/6
9/15 10/11 10/16
ICL's [1] 2/19
ID [1] 53/25
identifiable [2] $83 / 3$
104/23
identification [5] 8/21
15/9 17/2 40/17 45/6
identified [39] 12/23
13/7 20/11 27/15 28/6
28/11 39/14 40/23 41/8

42/6 46/22 50/23 51/8
62/1 62/5 62/24 68/21
69/19 70/7 70/11 87/9
87/19 88/4 101/15
111/21 114/12 114/16
122/7 130/21 130/25
131/2 132/11 132/19
139/23 145/19 145/23
151/2 156/4 157/2
identifies [1] 133/16 identify [17] 9/19
33/16 51/4 51/15 51/16 64/12 68/14 78/4 90/13
94/7 101/14 107/16
110/12 111/4 113/4
136/13 155/16
identifying [7] 19/18
30/23 35/24 40/18 48/6
138/6 144/14
identity [1] 154/7
ie [2] $2 / 18$ 65/21
ie that [2] 2/18 65/21
if [79] $2 / 133 / 14 / 116 / 6$
6/14 7/21 8/24 14/20
17/15 19/3 21/3 21/10
30/9 30/21 31/18 32/2
32/3 43/15 43/15 45/9
46/25 48/23 52/4 58/10
59/3 59/4 59/7 62/21
67/15 67/19 68/4 68/7
69/22 70/25 71/18
72/24 73/6 73/7 75/6
75/25 76/10 77/22 80/3
80/23 82/25 83/2 83/15
84/18 85/23 86/6 88/5
88/10 88/10 90/25 96/9
98/4 105/23 106/9
108/21 111/9 119/18
120/8 120/23 124/24
125/18 134/20 140/5
143/12 149/12 149/17
150/13 152/15 153/19
156/21 159/21 166/18
167/1 168/5 171/10
ii [3] 45/4 93/2 119/11
iii [3] 45/5 93/5 119/13
illustrated [1] 67/2
illustration [1] 69/12
immediately [2] 85/23 110/19
impact [26] 8/4 21/16
39/20 40/1 43/20 44/6

44/13 44/19 46/9 46/11 56/7 61/18 72/3 74/14 78/1 81/3 86/18 91/15 94/15 94/16 96/14 131/14 161/4 161/8 163/7 168/14
impacted [4] 55/7
109/1 109/4 138/7
implement [3] 8/25
24/5 96/5
implemented [3] 69/3
108/22 163/3
implication [1] 160/3 implications [2] 54/23 102/20
implied [1] 93/4
importance [5] 16/25
26/18 58/17 107/2
148/17
important [30] 1/25
8/18 8/22 9/2 10/2 10/3
14/2 16/6 20/13 25/19
26/17 27/6 28/8 30/24
33/9 33/14 33/15 65/20
79/4 104/11 112/12
117/22 121/6 123/21
123/25 128/19 135/25
140/14 142/7 162/15
importantly [4] 3/1
22/21 95/22 157/2
imposed [1] 74/10
imposition [1] 158/23
impossible [3] 24/9
64/25 149/5
impressed [1] 155/8
impression [1] 152/2
imprisonment [1]
143/19
improve [2] 14/19
154/19
improvement [2]
74/22 130/13
improvements [4]
29/4 109/18 111/6
141/19
improving [1] 2/21
inaccurate [1] 77/7 inadequate [2] 7/8
130/8
inadequately [1]
134/23
inappropriate [2]

| I | $29$ | 17 | installed [1] 65/14 | intimate [1] 138/8 |
| :---: | :---: | :---: | :---: | :---: |
|  | ind | informed [4] 43/6 | instances [4] 88/14 | into [48] 8/19 15/12 |
|  | 113/8 139/10 147/20 | 50/10 118/6 166/16 | 02/6 131/6 | 25/19 33/5 40/6 43 |
|  | indication [3] 4/25 | informing [2] 50/6 | instantly [1] 75/18 | 46/6 54/16 54/20 54/25 |
|  | 5/20 16/25 | 169/25 | instead [2] 107/14 | 58/25 63/19 66/19 |
|  | indications [1] 29/4 | Infrastructure [2] 22/8 | 138/25 | 66/22 66/23 67/14 |
| 20/17 21/20 40/22 41/ | indicator [2] 9/4 10/1 | 22/9 | instituted [1] 160/6 | 69/11 69/13 69/17 |
| $41 / 1141 / 1841 / 18$ | indicators [1] 87/17 | Infringe | institutional [1] 57/9 | 70/15 71/11 71/18 84/8 |
|  | individual [21] 66/25 | 38/20 | instruct [1] 153/6 | 85/14 86/11 96/9 98/8 |
|  | 72/4 72/7 88/22 100/14 | initial [9] 17/4 19/8 | instructed [1] 90/9 | 103/20 104/3 109/21 |
|  | 106/17 107/8 107/22 | 21/7 21/18 29/22 | instructing [3] 115/14 | 117/14 118/8 120/21 |
| 40/20 41/20 41/23 | 107/24 110/20 111/8 | 101/13 111/25 147/20 | 152/19 152/25 | 121/4 121/8 126/22 |
| 63/14 110/9 | 120/15 127/11 128/8 | 166/5 | instruction [2] 3 | 135/4 136/9 142/17 |
| include [3] | 128/9 128/25 138/21 | initially [3] 18/2 20/25 | 119/8 | 145/13 147/13 149/2 |
| 103/9 | 144/2 151/8 154/4 | 56/13 | instructions [2] 4/21 | 149/6 157/6 159/21 |
| included [14] 11/10 | 15 | inject [2] | 118/16 | 163/19 163/21 |
| 39/3 45/1 51/11 51/16 | individually [4] 41 | injected [1] 96/9 | instrumental [1] 91/20 | intranet [1] 27/13 |
| 78/6 94/20 103/25 | 60/23 70/18 92/12 | innocent [1] 144 | integration [1] 62/9 | introduce [2] 61/2 |
| 104/11 105/19 109/2 | individuals [11] 37 | Innovation [2] 125/8 | integrity [17] 52/24 | 114/1 |
| 122/4 122/10 130/22 | 57 |  | 54/2 | ntroduced [6] 12/3 |
| includes [1] 15/18 | 73/25 91 | input [6] | /12 57/15 58/25 | 22/6 39/13 47/1 |
| including [25] 12/12 | 139/10 139/12 170/11 | 57/21 63/17 104/3 | 70/14 101/11 | 130/1 |
| 13/8 22/15 34/20 38/1 | Industrial [2] 136/6 | 16 | 103/11 104/13 113/22 | introduction [6] 37/7 |
| 44/20 44/24 50/21 | 170 | inq | 114/24 121/1 140/1 | 37/9 41/4 53/8 123/10 |
| 71/15 73/11 88/13 | inex | Inquiry [73] | intend [5] 13/2 17/22 | 130/11 |
|  | 134/23 | 4/17 11/14 12/21 15/7 | 18/19 40/9 60/2 | inundated [1] 125/19 |
|  | infallible [2] 48/23 | 15/16 17/20 18/16 20/7 | intended [7] 4/10 4/13 | invaluable [1] 57/10 |
|  | 88/25 | 26/24 36/7 37/14 40/7 | 18/17 27/3 70/6 75/2 | investigate [53] 2/3 |
|  | infer [2] 86/1 148/2 | 46/14 58/17 60/4 60/15 | 170/14 | 2/5 2/25 7/19 7/24 8/23 |
| $160 / 22$ | inflated [1] 88/16 | 60/18 63/7 71/21 74/5 | intention [1] 139 | 15/24 17/23 18/4 18/11 |
| ongruous [1] 160/5 | influence [3] 64/1 | 74/25 78/15 83/13 | intentional [1] 156/2 | 22/12 22/20 23/3 24/ |
|  | 157/24 158/13 | 86/17 89/2 89/5 89/7 | interactive [1] 24/5 | 25/13 28/2 28/16 28/18 |
|  | influenced [4] 71/13 | 90/9 91/3 91/8 97/2 | interest [2] 36/7 53/10 | 29/7 32/12 33/19 34/23 |
|  | 139/17 139/18 162/18 | 99/10 103/12 105/21 | interested [1] 39/11 | 35/23 36/3 39/7 41/23 |
| $80 / 19110 / 11142 / 20$ | inform [6] 2/1 21/20 | 106/12 106/15 107/7 | interests [3] 9/16 | 42/5 42/7 46/20 60/19 |
|  | 50/16 51/24 76/9 | 112/16 113/15 117/20 | 10/16 52/19 | 63/7 70/8 84/21 85/9 |
|  | 120/1 | 121/3 122/22 123/21 | interference [1] 65/15 | 103/6 103/12 106/16 |
|  | information [46] 10/9 | 125/2 126/4 131/16 | interferes [1] 173/10 | 107/8 108/11 127/17 |
|  | 15/18 21/15 33/5 38/4 | 133/4 136/8 136/9 | interim [16] 98/13 99/3 | 128/2 128/10 132/13 |
| $44 / 14152 / 3$ | 38/5 38/8 49/22 60/12 | 139/15 140/23 142/1 | 101/12 105/4 106/2 | 136/11 147/2 149/10 |
| 44/14 152/3 | 86/14 101/23 105/22 | 149/10 152/15 153/20 | 108/1 108/7 110/2 | 149/15 152/15 159/1 |
| eed [3] 40/5 | 105/24 107/16 108/14 | 156/16 157/6 159/1 | 111/13 112/11 112/1 | 59/15 160/15 161/19 |
| $58 / 8$ | 110/18 118/10 118/17 | 160/25 161/19 162/2 | 112/22 114/13 126/13 | 163/5 |
|  | 119/5 119/21 120/17 | 163/5 163/15 170/5 | 137/9 137/13 | investigated [7] 33/20 |
| $124 / 13$ | 121/5 121/7 121/2 | 170/16 172/9 172/12 | internal [5] 26/10 53/5 | 34/24 66/13 106/12 |
| independent [7] 99/6 | 122/13 123/5 126/12 | 172/21 172/25 173/1 | 89/23 138/5 158/4 | 109/12 109/14 125/6 |
| 112/8 113/16 116/12 | 128/11 128/14 129/8 | 173 | interpreted [1] 160/5 | nvestigating [6] 32/19 |
| 135/22 149/23 154/24 | 130/8 139/13 140/4 | Inquiry | interrogate [1] 31/1 | 00/7 60/15 81/5 97/3 |
| independently [3] | 145/18 147/5 152/6 | 170/2 | [1] 12/4 | 133/9 |
| $66 / 1282 / 24153 / 4$ | 153/14 155/12 156/1 | insert [1] 96/3 | intervening [1] 103/13 | investigation [38] |
|  | 156/18 156/21 161/18 | insofar [4] 152/4 | intervention [1] 105/5 | 19/24 32/13 33/12 70/2 |
| indicate [4] 19/19 | 161/21 165/7 169/23 | 152/21 153/3 153/11 | interview [1] 125/7 | 71/10 72/15 82/5 82/15 |

## 1

investigation... [30]
85/20 86/4 89/16 90/15
93/8 98/8 100/16
100/21 101/16 102/4 104/7 106/1 106/23 106/24 107/18 108/24 109/19 112/12 114/20 121/15 122/18 123/8 123/18 126/21 130/1 130/4 134/17 142/10 154/5 156/10 investigations [21] 15/13 33/5 63/18 63/23 65/8 65/9 65/24 82/12 89/14 90/10 91/9 94/6 96/2 101/6 111/3 122/16 126/23 129/5 130/19 141/10 145/13
investigative [2] 127/12 141/3
investigators [10]
90/6 105/12 107/11 107/15 120/15 126/17 129/17 131/11 141/13 147/21
invite [1] 160/7
invited [1] 158/10
invites [1] 59/17
involve [3] 26/6 28/9 143/18
involved [17] 12/23
17/21 19/18 20/9 37/19 46/10 46/11 46/13 56/3 63/1 81/3 91/16 103/23 148/25 155/4 155/18 159/3
involvement [2] 1/21
46/8
involving [4] 39/16
77/8 105/8 139/9
Ireland [2] 128/6 156/3
irrespective [2] 128/21 166/20
Ismay [9] 52/22 53/1 53/4 53/11 56/9 56/11
56/19 57/14 103/9
Ismay's [2] 55/10 57/11
isn't [2] 16/25 104/9
isolation [1] 14/5
issue [47] 3/4 3/5 3/22

6/1 7/18 7/25 13/6 14/7 $161 / 7$ 161/7 162/1 15/17 19/4 21/14 26/13 162/2 162/15 163/22 29/6 33/19 42/7 47/23 165/16 165/18 166/4 51/13 51/25 52/2 52/10 166/22 167/1 168/10 52/13 52/16 58/12 169/6 169/9 170/1 62/15 63/10 63/12 170/2
69/20 70/19 71/6 79/19 issuing [3] 77/12 78/5 79/22 79/24 81/10 82/9 166/22
83/14 83/25 107/19 it's [33] 3/7 20/13 23/9 131/19 132/20 137/25 138/2 148/13 148/17 152/11 155/24 158/15 167/2
issue 41 [1] 71/6 issued [20] 48/10 48/17 74/23 77/18 77/24 78/9 79/18 80/21 81/5 81/9 81/14 83/23 84/7 84/12 98/23
105/15 107/23 107/23 123/3 123/16
issues [126] 1/13 3/12
8/7 8/9 9/25 12/16 13/3
14/2 14/4 14/4 14/8 14/11 18/4 18/22 20/20 23/2 24/11 26/4 26/15 27/4 27/15 28/25 29/2 32/11 33/15 33/17 39/19 40/10 43/2 43/2 43/3 43/5 46/13 47/15 47/19 48/23 50/23 54/3 56/15 56/16 57/19 59/7 59/8 59/11 59/16 59/21 59/22 60/20 63/6 66/17 68/14 68/17 68/19 71/6 72/8 74/12 77/12 78/4 83/3 83/5 88/13 89/17 90/25 92/5 92/18 92/21 92/22 92/24 93/1 93/10 93/13 93/22 93/23 95/3 96/22 96/24 101/11 101/14 103/17 104/14 106/5 106/12 107/13 107/17 107/20 109/9 109/22 110/25 112/23 117/21 118/2 118/5 118/7 123/18 129/8 130/22 130/22 130/25 131/2 131/17 135/7 135/14 136/11 140/18 143/14 146/18 147/1 151/21 156/19 160/16

24/14 27/5 29/16 32/10 32/12 39/17 53/6 59/11 64/19 74/4 80/5 87/6 91/1 92/24 93/9 105/14 119/15 119/15 119/17 119/17 119/18 123/24 133/18 137/14 139/4 139/5 157/15 159/24 172/23 172/25
italics [1] 119/14
items [2] 71/17 127/4
iteration [3] 32/23
49/16 94/2
ITIL [3] 22/8 22/9
22/10
ts [52] $2 / 73 / 107 / 12$ 20/25 22/25 28/5 32/14 joiners [2] 11/9 13/22 37/10 42/24 43/8 46/21 joint [2] 114/7 114/8 52/18 52/19 52/20 53/7 53/22 53/23 55/8 56/1 61/12 61/22 71/24 72/20 72/21 90/10 91/8 97/9 99/11 101/16 111/15 113/17 121/9 121/25 123/6 130/1 130/18 138/5 141/9 141/17 141/21 142/4 142/14 144/5 146/18 147/1 147/16 148/5 149/20 150/25 156/2 160/9 160/12
itself [21] $3 / 16$ 11/12 15/2 19/16 42/3 44/17 46/4 49/8 62/1 63/17 69/3 74/18 94/18 97/1 101/24 104/19 117/22 120/9 131/5 134/6 162/16
iv [2] 45/8 119/19

## J

Jacqueline [1] 84/3
James [2] 105/5 129/2

113/14
January 1999 [1] 2/11 Jenkins [24] 34/2 34/2
34/7 46/9 51/18 57/13 101/21 104/1 104/8 113/19 114/3 114/4 114/18 114/23 115/8 115/21 115/25 116/9 137/24 140/15 140/15 140/19 156/24 163/22 Jenkins' [3] 116/4 116/17 117/15 Jennings [3] 114/4 115/7 116/14
JFSA [10] 91/13 91/20
91/22 105/10 105/16
106/18 111/22 112/5
129/2 129/22
Jo [1] 124/3
Jo Hamilton [1] 124/3
John [4] 7/6 29/13
29/15 121/25
join [1] 1/8

Jonathan [4] 102/11
102/11 145/1 161/22
judge [15] 56/14 56/18
92/15 112/8 145/2
165/11 165/19 165/21
166/18 166/19 167/14
167/15 168/9 168/12
169/3
judge's [1] 166/6
judgment [22] 26/15
39/19 54/4 60/21 66/17
68/19 92/22 92/22 93/1
93/22 93/23 94/9 95/13
96/12 96/22 140/18
160/21 161/7 161/7
161/9 166/4 168/11
judgments [9] 91/7
92/17 92/20 92/21
92/25 100/7 100/13
102/19 163/14
judiciary [1] 167/22
July [14] 4/20 62/8
107/1 112/21 113/2
113/18 117/19 118/1
118/12 119/2 123/3

Jan [1] 23/9
128/20 157/13 159/23
January [3] 2/11 104/8 July 2000 [1] 4/20

July 2012 [1] 128/20
July 2013 [3] 107/1
112/21 117/19
June [8] 51/1 51/8 103/16 114/15 114/18 135/18 151/18 162/22
June 2014 [1] 151/18 junior [2] 145/3 164/5 just [31] 1/5 5/5 7/16 10/13 19/6 21/10 32/4 37/15 38/22 48/18 54/13 64/14 70/22 70/24 71/1 72/2 83/21 87/13 88/10 108/19
139/3 142/11 149/15
157/23 161/22 162/9 171/15 171/19 171/23
172/7 173/13
justice [39] 26/14
34/25 35/18 39/18
47/18 47/25 54/4 58/5
60/16 61/8 62/20 63/5
63/13 70/11 74/12
89/18 91/7 91/12 92/15
92/17 93/9 93/14 93/16
94/9 95/8 95/22 100/7
100/14 102/19 120/7
139/21 158/16 161/9
163/14 165/14 166/13
167/5 169/11 169/16
Justice for [1] 91/12
justify [1] 112/18

## K

Kathryn [1] 2/11
Kay [1] 105/9
Kearns [3] 1/20 1/21 1/23
keen [1] 1/22
KEL [7] 27/14 29/12 29/18 29/25 30/10 30/15 32/5
KELs [3] 27/12 27/20 32/7
kept [5] 17/24 22/17 87/2 94/5 140/13
key [15] 9/4 10/10 16/5 23/25 30/17 38/7 44/25 79/10 90/14 92/24 93/23 101/6 107/16

| K |
| :--- |
| key...[2] $163 / 22$ <br> $164 / 13$ |

keyboard [1] 64/5 kind [6] 62/14 76/22 140/6 142/2 142/3 160/25
kinds [1] 173/20
King [22] 101/19 102/7
105/2 112/25 113/13
114/15 118/1 137/16
137/19 137/20 138/3
138/5 138/15 140/10
141/13 142/18 146/8
146/11 146/14 148/7
148/21 148/24
King's [6] 90/8 102/5
136/17 137/1 $137 / 12$ 137/13
knew [7] 52/15 58/15 58/20 60/21 63/8 66/13 70/8
Knight [2] 102/12 145/4
know [15] 1/8 25/2
35/21 54/3 84/12 92/4
99/8 100/8 104/13
127/14 127/25 132/23
139/19 140/18 156/24
knowing [1] 165/15
knowledge [19] 57/23
59/15 59/17 59/24 60/2
60/8 70/17 84/24 88/24
89/15 96/8 102/24
120/16 121/10 132/3
132/8 132/17 136/11
151/14
known [15] 20/23
25/16 27/11 $27 / 11$
27/12 35/2 36/23 41/1
43/5 49/9 55/3 58/22
115/25 137/6 149/9
KPI [1] 9/4

## L

labelled [1] 63/12
labours [1] 115/11
lack [10] 12/15 $37 / 11$
108/13 110/23 111/2 111/10 130/13 155/10 156/13 160/12
lacked [1] 76/22

| laid [1] 59/4 | 95/15 95/21 96/13 |
| :---: | :---: |
| landmark [1] 55/17 | 96/16 |
| language [2] 66/5 81/2 | Legacy Horizon [1] |
| large [5] 18/16 84/14 | 42/24 |
| 84/16 92/5 161/24 | legal [27] 90/6 93/19 |
| last [10] 25/3 34/17 | 97/18 99/1 102/21 |
| 54/22 64/1 70/10 84/23 | 121/25 126/23 127/7 |
| 111/20 129/4 165/19 | 128/24 129/6 129/8 |
| 172/20 | 129/9 129/20 136/15 |
| last-minute [1] 34/17 | 140/5 144/21 153/12 |
| lasting [1] 94/16 | 161/24 162/5 163/3 |
| lastly [4] 12/8 26/10 | 163/18 163/25 164/7 |
| 68/18 117/11 | 165/6 165/13 166/5 |

late [3] 141/2 161/14
172/15
later [12] 19/11 46/12
50/14 52/20 60/13
71/21 73/22 104/25
125/19 131/16 138/18 139/22
latter [1] 161/8
law [7] 91/23 92/5
120/1 143/2 150/16 164/12 168/9
lawyers [9] 55/20 90/6 lesser [4] 143/5
136/15 139/12 141/13 $143 / 24$ 143/24 144/1
158/4 161/1 165/23
169/22
layer [2] 19/20 40/14
lead [2] $35 / 1341 / 8$
leaders [1] 17/20
leadership [2] 91/17 142/4
leading [3] 5/13 164/3
166/10
leads [1] $8 / 9$
learned [1] 170/11
learning [2] 11/16
55/24
least [12] 8/18 10/2 10/21 27/25 58/5 61/17 liability [3] 73/9 93/19 88/16 107/5 116/17
152/5 156/6 171/14
leaves [1] 78/10
led [6] 9/23 43/10 63/18 91/6 91/11 126/4 Library [2] 22/8 22/9 ledgers [1] 77/20 lifestyle [2] 124/25 Lee [1] 56/3 124/25
legacy [18] 7/15 42/24 lifetime [4] 42/24 49/4 49/5 49/7 52/21 58/6 153/3 153/10 61/15 61/17 61/24 62/1 light [7] 91/3 106/14 63/4 74/14 94/1 95/6 129/21 129/23 140/24

152/1 152/17
lights [1] 70/24
like [10] $5 / 7$ 13/20
25/13 33/20 34/19
57/14 62/24 84/16
85/17 136/1
likelihood [3] 95/9
145/24 154/15
likely [9] 4/15 58/8
59/12 144/16 144/18
144/19 145/20 159/13 170/4
limit [2] 137/18 137/21
limitation [1] 129/24
limitations [2] 130/18 154/3
limited [20] 25/1 36/25 44/10 105/10 105/23 105/24 105/24 106/11 113/22 116/14 116/16 116/16 116/20 135/5
137/19 137/21 141/5
155/7 157/14 167/9
line [34] 19/7 19/13
19/14 19/17 19/20
19/22 20/9 20/17 20/22
20/24 21/20 21/23
22/20 26/25 27/2 27/5
27/18 27/20 27/23 28/1 28/18 29/14 31/6 31/16 32/8 34/5 37/17 37/24 38/10 40/14 41/25 42/2 42/6 87/8
Line' [1] 134/4
lines [5] 21/8 21/12
27/22 29/12 64/1
link [1] 28/13
linked [4] 14/25 33/16
61/12 62/5
Linnell [1] 105/9
list [14] 13/14 14/3
14/10 32/3 34/13 43/3
59/6 59/8 59/16 59/22
70/11 88/11 162/2
170/2
listed [1] $72 / 2$
listing [1] 34/3
litigation [51] 73/17
89/20 90/21 90/24 91/5
91/5 91/6 91/12 92/3
92/9 92/16 96/21 97/1
97/5 97/6 97/20 97/21

98/1 98/3 98/7 98/16 98/18 99/2 101/5
102/22 109/25 112/19 133/4 139/17 140/20 141/1 152/11 152/15 157/18 159/22 161/15 161/25 162/3 162/7
162/10 162/14 162/17
163/6 163/10 163/16
164/7 164/13 165/2
165/9 165/15 169/25
little [7] 75/3 103/12
110/25 125/19 133/19
167/14 172/15
live [7] 1/10 6/17 36/13
37/2 37/12 50/24 132/2
LLP [1] 162/9
load [1] 23/19
local [18] 66/19 66/20
66/22 67/11 67/16
67/22 68/6 68/9 68/20
68/23 69/6 69/7 69/10
69/13 69/17 69/25
109/4 114/21
location [2] 33/10

## 120/21

Lock [1] 12/13
lodge [1] 172/9
lodging [1] 166/8
$\log$ [1] 35/21
logged [1] 41/9
logging [1] 63/16
$\operatorname{login}$ [1] $53 / 25$
logistical [1] 173/21
logs [7] 27/12 41/18
53/23 55/23 56/1
104/22 152/20
long [6] 12/6 59/3 70/5
108/3 133/5 171/15
longer [4] 16/23
129/10 129/14 172/24
look [33] 6/5 6/15 7/3
21/11 23/12 31/7 31/18
33/23 33/24 54/9 54/9
63/21 70/22 70/25 71/2
73/7 83/21 84/18 85/14
87/6 88/6 88/10 96/10
118/18 118/22 121/4
121/8 136/9 139/1
139/4 157/6 160/25
170/25
looked [3] 121/19

| L | lower [1] 28/24 | 32/23 92/9 133 | $11$ | 110/24 111/11 130/15 |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { looked... [2] 149/19 } \\ & 151 / 11 \end{aligned}$ | lower-level [1] 28/24 | managed [9] 20/ | 115/25 116/18 117/2 | meanwhile [2] 12 |
|  | lunch [1] 99/18 | 39/12 41/23 73/12 | 118/14 118/20 119/3 | 143/4 |
| looking [10] 23/24 50/13 52/3 85/7 103/20 | Lynne [1] 54/6 | 75/14 91/22 92/3 92/8 | 9/25 120/23 140/2 | asur |
|  | M | 92/14 | 155/2 161/13 |  |
| 122/22 126/4 135/8 |  |  |  |  |
| 139/15 154/18 | made [59] |  | 5 | measures [2] 40/13 |
| loophole [2] 39/4 | 22 29/4 37/10 42/17 | 22/11 27/24 40/16 | 70/25 71/19 79/10 | echanism [1] 120/19 |
|  | 42/23 44/18 45/23 46/4 | 40/22 41/11 41/18 | 133/2 135/14 148/3 | mechanisms [4] 37/12 |
| 106/18 124/7 167/4 | 56/8 63/13 63/23 73/2 | 41/19 41/21 42/10 | 152/9 158/11 165/11 | 44/10 59/19 87/1 |
| 167/4 167/7 167/12 | 81/23 82/16 82/17 | 44/21 45/11 | 16 | edia [3] 53/9 135 |
| 167/17 167/20 167/23 | 87 | 60/10 159/5 165/17 | matters [12] | 65/25 |
| 168/4 168/5 168/16 | 87/22 87/25 88/2 88/1 | manager [5] 50/15 | 28/15 59/12 106/21 | mediation [15] 89/ |
| 168/17 168/19 168/2 | 91/24 92/9 92/13 93/14 | 74/23 76/19 85/13 | 109/16 109/21 128/19 | 91/20 102/8 111/14 |
| 168/23 169/16 | 97/8 97/12 98/22 98/25 | 105/9 | 138/24 138/25 164/8 | 112/1 124/8 124/10 |
| Lord Arbuthno | 124 119/23 | managerial [1] | 170/23 1 | 26/5 139/1 139/9 |
| 105/6 105/9 106/18 | 120/13 131/7 13 | managers [6] 5/1 6/16 | maximum [3] 14 | 39/16 140/7 15 |
| Lord Grabiner [2] | 133/9 134/9 $143 / 8$ | 7/1 12/25 14/14 99/13 | 143/3 143/18 | 59/3 161/2 |
| 168/16 168/21 |  | m | may [53] 2/18 | meet [4] 23/21 24 |
| Lord Grabiner's | 9 |  | 2326 | 156/23 |
| 168/19 |  | manifestatio | /23 28/15 28/15 3 | meeting [8] 42/9 9 |
| - | 1 | 32/25 | 42/2 57/5 58/25 59/2 | 91/15 118/8 118/9 |
|  | 169/5 170/13 171/15 | manifested [2] 25/6 | 59/2 61/13 65/10 66/25 | 25/8 125/14 |
|  |  | 30/24 | 76/23 78/12 78/15 81/2 | meetings [2] 117 |
|  | M | manner [ | 85/24 86/6 88/18 100/5 | 164/10 |
| 167/20 168/17 | 114/3 128/5 | 141/12 | 4/19 105/5 117/14 | member [4] 50/11 |
|  |  | manual [5] 25/24 31 | 120/5 128/7 132/15 | 81/15 84/2 167/21 |
|  | mainly [1] 134/3 | 37/22 38/18 41/12 | 137/18 138/11 138/16 | members [3] 53/9 |
|  | maintain [3] 13/21 | manually [2] 48/14 | 139/12 143/12 143/20 | 103/2 125/25 |
| 55/1 56/16 66/25 67/8 | 32/5 32/7 | 48/19 | 143/23 143/24 144/7 | morandum |
| 69/25 69/13 69/9 | maintained [3] | many [16] 16/9 17/21 | 144/7 144/12 144/16 | 20 |
|  | 72/24 107/ | 34/9 46/13 76/21 84/17 | 144/16 151/18 152/6 | mention [4] 4/23 77/4 |
| 75/6 75/8 75/12 80/8 | major [2] 42/13 50/9 | 106/20 108/22 114/5 | 154/15 160/11 160/14 | 86/16 91/21 |
| $87$ | majority [5] 91/25 | 114/5 131/6 131/12 | 161/19 163/9 168/9 | entioned [8] |
| $\text { 164/17 } 16$ | 107/4 133/23 150/24 | 144/6 155/17 172/13 | 173/1 | 13/3 74/13 77/8 104 |
| loss/gain | 15 | 17 | 2012 [1] 105/5 | 132/4 147/25 156/19 |
| losses [25] | make [26] 2/19 3/18 | March [8] 1/19 48/5 | maybe [1] 41/3 | enu [1] 1/13 |
| $\text { 68/22 69/7 72/11 } 72$ | 13/4 20/10 44/2 44/8 | 92/13 100/5 125/22 | McNiven [2] 7/5 7/7 | mere [1] 64/23 |
| $73 / 573 / 1073 / 24$ | 45/15 49/23 52/2 59/10 | 142/6 147/24 167/7 | me [11] 47/11 60/24 | merely [1] 80/9 |
| $74 / 1$ | $1762 / 2264 / 25$ | March 1997 [1] 1/19 | 70/22 71/1 77/4 119/5 | erits [3] 164/12 |
| 88/1 | /16 76/10 78/2 79/6 | March 2009 [1] 48/5 | 119/10 119/14 138/10 | 164/15 164/22 |
| 97/25 98/6 108/9 | 93 | March 2021 [1] 100/5 | 138/10 171 | ns [2] 171/19 |
| 123/14 130/8 145 | 141/18 15 | Marilyn [1] 50/16 | mean [4] 34/4 | 172/ |
| 146/4 147/16 | 159/11 160/17 171/4 | Mark [2] 50/14 124/ | 100/16 115/5 | message [1] 61/19 |
| lost [2] 67/21 124/15 | makes [3] 34/16 92/7 | marking [1] 138/3 | meaning [2] 74/ | [2] 12] $391177 / 5$ |
| lot [1] 170/15 | making [6] 8/7 79/3 | master [2] 65/24 92/13 match [3] 30/3 30/7 | $\begin{aligned} & 139 / 6 \\ & \text { means [8] } 17 / 4 \text { 54/1 } \end{aligned}$ | method [2] 39/1 77/5 methods [1] 9/21 |
| lots [1] 30/4 | 89/13 160/9 163/20 | match [3] 30/3 30/7 80/20 | means [8] 17/4 54/1 75/7 86/2 99/13 115/ | methods [1] 9/21 Microsoft [1] 39/3 |
| lottery [5] 47/19 83/25 84/7 84/9 130/24 | 166/12 | matching [1] 77/23 | 158/17 172/16 | middle [4] 12/25 25/25 |
|  | malicious [1] 97/13 | material [19] 5/11 5/23 | meant [9] 6/20 28/25 | 33/25 141/25 |
| low [1] 2/18 | manage [4] 25/18 | 95/10 95/13 95/18 | 49/7 72/12 73/18 74/24 | midway [1] 169/5 |

## M

might [13] 14/25 15/4
64/14 78/16 99/17 115/16 147/6 149/7 151/9 161/4 161/5 165/3 173/8
migrate [2] 50/1 50/7 migrated [3] 50/8 50/17 50/21
migration [10] 5/13
5/21 6/11 6/13 7/15
22/18 49/5 49/12 50/18 54/18
Mike [2] 50/12 54/11 milestones [2] 90/14 101/6
Millie [1] 56/5
million [8] 87/11 87/12
87/12 97/17 97/17
97/20 97/24 97/24
mind [3] $8 / 758 / 20$
101/5
minded [1] 166/16
minimal [1] 133/25
minimising [1] 107/2
minimum [4] $3 / 133 / 19$
31/22 31/22
minister [2] 103/3 157/3
Minister's [1] 136/1
ministers [1] 90/20
minor [1] 58/24
minute [3] 34/17
119/19 165/20
minuted [4] 119/15
119/18 120/12 120/23
minutes [13] 47/2 47/4
47/5 47/7 70/10 118/8
119/6 119/8 119/11
120/12 171/13 171/22
172/4
misinterpretation [1]
160/2
misinterpreted [1] 104/19
miskey [1] 64/23
misleading [2] 154/1 154/11
mismatch [7] 30/12
61/5 66/16 67/12 68/10 109/3 114/21
mismatches [2] 29/17

41/7
misplaced [1] 157/25
Misra [1] 139/10
Misra's [1] 139/19
missed [1] 171/25
missing [8] 53/13
53/14 54/21 54/25 62/2 62/13 111/5 173/10 misstated [1] 93/18 mistake [1] 78/11
misused [1] 112/17 mitigated [1] 130/16
model [1] 23/22
modern [2] 122/11
173/14
modification [4] 43/16
45/25 47/14 49/4
modifications [6] 36/9
42/22 42/23 43/4 44/18
47/15
modular [1] 12/9
modules [2] 6/17
11/25
Moloney [1] 171/7
moment [15] 1/4 36/8
37/15 43/1 46/25 49/21
52/3 74/13 75/19 89/1
91/21 96/23 99/17
135/2 168/2
money [9] 34/18 45/3
53/14 63/1 71/25 84/14
84/15 124/6 156/6
monies [1] 79/2
monitor [4] 29/9 59/19
99/9 112/6
monitored [2] 20/1
24/12
monitoring [5] 40/25
45/5 64/13 68/15 89/22
month [2] 12/4 79/7
monthly [1] 45/14 months [6] 12/5 12/7
29/19 87/10 89/6 129/4
more [26] 15/14 16/9
16/14 17/4 27/9 27/21
37/20 39/22 42/19 46/1
48/12 66/24 70/12
79/21 81/13 91/2 96/18
97/3 101/1 109/13
140/4 144/16 147/15
159/13 171/22 172/3
moreover [9] 17/3

18/1 32/14 40/18 60/18 100/20 115/17 149/4 165/5
morning [5] 1/7 25/3
70/25 119/2 170/22
most [9] 2/19 35/17
43/16 87/19 92/17 98/4
137/5 159/4 170/4
motivation [1] 24/10
mounted [1] 57/6
mouthpiece [1] 21/7
move [1] 172/1
moving [2] 24/13 142/6
MP [1] 129/2
MPs [3] 111/22 125/10 129/22
MR [145] 1/3 1/9 1/21 1/23 5/9 7/7 24/18 24/21 25/10 26/14 28/20 28/23 34/2 34/7 34/13 34/25 35/18 39/18 47/3 47/18 47/25 50/10 53/1 53/4 53/11 54/4 55/10 56/5 56/8 56/9 56/11 56/19 56/20 57/11 57/14 58/5 60/16 61/8 62/20 63/5 63/13 70/11 70/21 74/12 74/25 75/23 77/10 81/22 81/23 81/24 82/2 84/22 85/9 85/12 85/14 85/15 86/1 86/4 91/7 92/15 92/17 93/9 93/14 93/16 94/9 95/8 95/22 100/7 100/14 102/16 102/19 103/9 113/2 113/18 114/2 114/3 114/5 114/11 114/12 114/18 114/22 115/4 115/8 115/20 118/3 118/13 118/17 119/21 120/3 120/10 121/8 124/24 136/16 137/2 137/11 138/2 138/4 138/17 138/23 139/3 139/6 139/8 140/8 140/15 140/15 140/24 140/25 141/2 141/8 141/22 142/6 143/7 143/10 146/10 146/10 147/8 147/24 149/25

157/11 157/19 158/15 159/19 160/21 161/6 161/8 161/9 161/14 161/22 163/1 163/14 165/14 166/13 167/5 169/11 170/24 171/3 171/7 171/7 171/8 171/19 171/25 172/2 173/12 173/22 175/2 Mr Altman [29] 102/16 136/16 137/2 137/11 138/2 138/17 139/3 139/6 139/8 140/8 140/15 140/25 141/2 141/8 141/22 142/6 143/7 146/10 146/10 147/8 149/25 157/11 157/19 158/15 159/19 161/6 161/8 161/14 161/22
Mr Altman's [5] 138/4 138/23 143/10 147/24 160/21
Mr Baker [3] 24/18 24/21 25/10
Mr Barnard [3] 84/22
Mr Beer [9] 1/9 5/9
47/3 70/21 170/24
171/3 171/25 173/12 173/22
Mr Castleton [2] 56/5 56/8
Mr Cipione [2] 28/20
28/23
Mr Clarke [16] 113/2 113/18 114/2 114/5
114/11 114/12 114/22 115/4 115/20 118/3
118/13 118/17 119/21 120/3 120/10 140/24
Mr Clarke's [1] 121/8 Mr D'Alvarez [1] 50/10 Mr Darlington [1] 56/20
Mr Davies [1] 124/24
Mr Henry [1] 171/8
Mr Ismay [8] 53/1 53/4 53/11 56/9 56/11 56/19 57/14 103/9
Mr Ismay's [1] 55/10 Mr Jenkins [6] 34/2

34/7 114/3 114/18 115/8 140/15
Mr Justice [2] 63/5 70/11
Mr Justice Fraser [25]
34/25 35/18 39/18
47/18 47/25 54/4 58/5
60/16 62/20 63/13
74/12 91/7 92/15 92/17
93/9 93/14 95/8 95/22
100/7 100/14 102/19
163/14 166/13 167/5
169/11
Mr Justice Fraser's [6]
26/14 61/8 93/16 94/9
161/9 165/14
Mr Kearns [2] 1/21
1/23
Mr McNiven [1] 7/7
Mr Mertens [2] 171/19
172/2
Mr Moloney [1] 171/7
Mr Orzel [1] 34/13
Mr Parker's [1] 163/1
Mr Stein [1] 171/7
Mr Trotter [2] 85/15 86/1
Mr Trotter's [1] 86/4
Mr Winn [6] 74/25
75/23 77/10 81/23
81/24 82/2
Mr Winn's [1] 81/22
Ms [9] 2/20 23/14
51/17 51/24 104/1
104/9 104/10 104/15
104/25
Ms Cook [1] 2/20
Ms Holmes [1] 23/14
Ms Rose [4] 104/1
104/9 104/10 104/15
Ms Rose's [1] 104/25
Ms Thomas [2] 51/17
51/24
MSU [5] 20/1 20/7
40/16 40/25 41/8
much [15] 1/7 91/3
97/3 99/21 108/10
109/16 110/3 136/25
147/7 155/21 163/18
165/1 171/21 171/23
173/23
multiple [4] 81/1

| M | needed [7] 5/21 76/ | $117 / 7 \text { 124/21 127/9 }$ | 105/14 131/3 | Observations [1] |
| :---: | :---: | :---: | :---: | :---: |
| multiple... [3] 107/20 | 113/8 122/17 126/11 |  |  | 167/9 |
| 107/20 122/14 |  | 131/23 135/24 136/2 | notwithstanding [4] | observed [4] 87/15 |
| must [15] 12/16 14/5 | needn't [4] 36/12 39/6 | 137/14 141/9 141/1 | 117/2 | /7 15 |
| 15/8 38/10 39/1 66/5 | 80/14 103/18 | 142/15 146/3 151/ | November [3] 91/1 | observer [1] 166/16 |
| 115/2 115/23 117/8 | needs [7] 1/18 1/25 | 157/4 157/23 157/2 | 112/10 117/20 | obstructing [1] 125/11 |
| 144/5 148/7 148/25 | 2/6 2/9 13/9 38/10 | 158/2 158/8 159/12 | November 2009 [ | obtain [6] 8/15 9/22 |
| 162/15 165/1 166/19 | 46/22 | 159/23 166/7 168/1 | 91/14 | 91/23 99/14 139/13 |
| my [8] 5/6 34/9 54/11 | negative [1] 165/25 | 168/6 168/22 | November 2020 [1] | 169/13 |
| 69/22 70/24 91/2 | neglige | nobody |  | obtained |
| 138/12 172/23 | negotiated [1] 114/7 | node [4] 61/11 61/13 | now [34] 1/5 1/20 4/12 | obtaining [1] 126/19 |
| myself [1] 1/6 | negotiating [1] 49/12 | 62/13 62/17 | 5/9 6/12 10/1 14/7 18/3 | obvious [4] 45/25 85/6 |
|  | Neil [1] 84/20 | nodes [3] 61/10 61/12 | 18/15 20/12 35/9 | 91/1 133/10 |
| N | neither [1] 60/2 | 61/22 | 36/12 37/5 39/20 40/15 | obviously [4] |
| naive [1] 84/25 | network [11] 6/23 11/2 | non [4] 26/16 121/16 | 42/1 55/9 70/19 83/11 | 26/3 27/6 172/15 |
| name [3] 29/22 63/1 | 13/18 13/21 17/18 | 137/24 161/12 | 85/8 102/11 103/14 | occasion [1] 95/10 |
| 84/4 | 17/22 18/2 20/5 76/4 | Non-conformance [1] | 105/6 116/24 117/2 | occasionally [1] |
| named [1] 56/3 | 106/22 133/12 | 121/16 | 127/14 127/25 136 | 110 |
| namely [7] 8/10 36/7 | Neuberger [6] 167/4 | non-critical [1] 26/16 | 138/23 145/2 148/1 | occasions [1] 95/6 |
| 61/3 64/4 98/10 101/17 | 167/7 167/12 167/17 | non-disclosure [2] | 148/19 152/3 | occur [2] 95/5 139/21 |
| 138/20 | 167/20 168/17 | 137/24 161/12 | nuclear [1] 166/23 | occurred [12] 28/12 |
| names [1] 124/5 | neutral [1] 111/12 | none [2] 97/9 145/19 | number [36] 8/3 11/3 | 35/4 42/4 66/3 68/12 |
| narrow [2] 97/14 | never [2] 131/25 | nonsense [1] 169/3 | 12/23 30/16 32/4 35/17 | 70/6 82/23 94/16 |
| 143/21 | 169/20 | nor [1] 60/24 | 35/20 44/19 46/19 | 108/23 122/21 123/22 |
| national [7] 11/1 24/15 | nevertheless [2] 110/4 | normally [1] 139/14 | 55/11 61/8 62/14 63/18 | 127/22 |
| 47/19 53/9 83/25 | 130/20 | not [176] | 68/19 72/8 77/5 77/12 | occurring [2] 62/12 |
| 125/15 130/24 | new [19] 11/9 12/5 | not.' [1] 119/18 | 83/24 92/5 96/14 96/19 | 65/22 |
| nature [7] 13/15 17/4 | 12/8 13/21 20/14 22/4 | Notably [1] 7/10 | 112/11 116/24 117/6 | OCP [1] 36/23 |
| 21/15 58/13 60/6 94/21 | 28/10 28/13 33/1 39/5 | note [15] 20/13 26/12 | 119/7 122/7 123/18 | OCPs [1] 37/1 |
| 159/9 | 43/23 50/17 65/8 66/23 | 30/15 38/21 50/25 | 124/19 126/20 127/1 | OCR [2] 36/19 36/20 |
| NBSC [14] 18/3 18/5 | 67/13 67/14 85/10 | 65/17 75/2 76/24 79/4 | 127/5 130/21 134/9 | OCRs [1] 37/1 |
| 18/7 18/11 24/2 76/3 | 111/23 130/11 | 84/11 139/2 165/16 | 153/5 159/7 173/4 | October [7] 1/1 33/2 |
| 76/4 82/17 83/1 83/5 | next [12] 21/21 29/19 | 168/3 168/23 173/13 | Number 10 [1] 61/8 | 77/16 87/4 121/15 |
| 83/15 154/1 154/6 | 34/15 43/19 50/18 64/2 | noted [22] 24/6 26/20 | number 3 [1] 68/19 | 140/8 150/1 |
| 154/12 | 88/6 89/10 116/22 | 56/14 108/1 108/21 | number 7 [1] 32/4 | October 2004 [1] 87/4 |
| neatly [1] | 117/5 124/7 170/4 | 109/19 109/22 131/24 | numbered [1] 66/17 | October 2007 [1] |
| nebulous [1] 66/14 | NFSP [6] 24/16 50/16 | 132/12 143/4 145/18 | numbers [1] 29/23 | 77/16 |
| necessarily [2] 15/3 | 57/19 90/5 125/17 | 147/11 147/17 148/2 | numerous [3] 94/11 | off [5] 6/10 37/22 39/4 |
| 135/11 | 135/16 | 148/8 149/25 153/23 | 95/6 96/15 | 40/7 52/7 |
| necessary [6] 3/19 | NFSP00000020 [1] | 160/24 161/14 167/17 | 0 | offence [7] 142/19 |
| 102/3 106/9 123/24 | 24/16 | 167/20 167/23 |  | 142/25 143/1 143/24 |
| 126/21 164/22 | NFSP00000061 [1] | notes [2] 28/23 164/11 | oath [1] 114/9 object [1] 3/10 | 143/24 144/1 144/4 |
| need [32] 1/15 3/18 | 50/19 | noteworthy [1] 43/16 | object [1] $3 / 10$ <br> objective [5] 53/5 53/7 | offences [11] 118/3 |
| 4/11 9/18 15/3 16/17 | Nichola [1] 12/12 | nothing [1] 159/12 | objective [5] 53/5 53/7 | 142/21 143/2 143/2 |
| 17/8 23/21 34/10 38/12 | Nichola Arch [1] 12/12 | notice [2] 87/18 | 77/20 112/1 134/19 | 143/13 143/17 144/7 |
| 42/14 48/19 51/14 | night [1] 172/20 | 111/15 |  | 148/2 149/2 158/13 |
| 52/14 79/24 80/15 | no [44] 4/11 24/23 | notices [1] 172/8 | obligation [1] 74/10 | 158/18 |
| 85/22 99/1 99/5 101/23 | 26/22 34/21 38/11 | notified [3] 78/11 | bigations [5] 8/15 | offenders [2] 144/7 |
| 113/2 120/18 133/19 | 38/14 42/13 55/12 | 126/1 171/18 | 2/10 72/17 120/5 | 158/17 |
| 134/12 137/14 154/21 | 68/11 74/17 79/5 83/15 | notify [1] 172/25 | 161/10 | offer [1] 76/7 |
| 159/23 161/5 168/1 | $\begin{aligned} & \text { 84/24 101/7 107/2 } \\ & 110 / 6 ~ 112 / 14113 / 7 \end{aligned}$ | notifying [1] 106/22 noting [3] 96/24 | $\begin{aligned} & \text { observation [3] 54/14 } \\ & \text { 107/6 134/1 } \end{aligned}$ | offered [1] 134/15 office [258] |

## 0

Office's [57] 2/21 5/18 7/4 7/20 12/24 18/1 49/17 52/17 55/7 55/15 57/15 72/11 73/4 73/5 73/16 73/25 75/18 76/5 80/18 90/9 93/12 93/20 94/10 101/10 101/16 101/18 102/9 102/18 104/5 105/3 105/8 108/2 110/21 121/25 124/15 126/11 $127 / 4$ 127/9 127/25 129/16 130/14 133/23 142/2 148/4 148/8 155/3 159/17 160/8 162/12 162/18 163/8 163/16 163/19 165/13 166/5 169/7 169/25
Officers [1] 7/13
offices [5] 24/25 50/7 50/17 84/17 114/17
official [1] 82/18 often [3] 135/3 143/24 $157 / 7$
Okay [1] 47/7
older [1] 173/4
once [5] 5/2 8/14
75/11 152/12 169/22 one [53] 6/2 7/10 10/21 12/2 12/4 12/15 13/14 14/25 24/13 26/9 32/4 35/5 43/18 44/20 47/20 48/18 50/24 51/9 54/13 54/22 55/14 59/11 61/1 64/20 66/21 66/24 67/5 67/8 67/8 67/25 77/14 81/10 83/21 84/16 108/12 109/6 112/13 120/21 123/4 131/19 131/23 132/4 135/23 139/4 140/13 147/17 148/17 155/23 165/8 170/1 171/23 172/7 172/15
one-day [1] 12/2 one-third [1] 51/9 ongoing [2] 116/8 152/7
online [27] 1/8 11/24
12/9 20/16 22/19 29/17 42/25 49/3 49/6 49/20

49/23 49/24 50/24 51/2 opportunities [1] 52/22 52/24 57/18 58/6 111/5
66/16 67/14 69/16 opportunity [4] 38/17 69/24 94/2 95/7 95/16 80/3 81/21 110/25 95/21 173/6
Online's [1] 49/16
only [33] $3 / 256 / 11$
13/6 14/3 18/19 20/7 20/17 28/13 41/13 45/4 67/22 76/18 95/4 97/23 options [4] 42/18 109/23 110/3 120/10

46/21 74/15 81/10 129/18 134/6 137/22 or [180] 137/24 142/16 143/20 order [15] 3/20 10/4 155/1 155/7 155/23 158/2 158/8 158/12 160/8 165/23 170/1 171/13
onsite [3] 11/17 11/21 12/1
onto [1] 21/20
onus [1] 86/9
onwards [2] 75/19 102/17
open [1] 160/17
opening [16] 1/3 16/4 16/13 18/20 19/21 $20 / 8$ 72/9 90/13 91/2 137/8 162/13 170/15 170/25 171/4 171/15 175/2 openings [2] 171/1 171/6 operate [3] 16/3 18/12 133/24
operated [10] 17/18
18/8 31/2 41/22 42/6 47/20 47/21 67/3 108/13 157/22
operating [7] 13/24 15/20 21/6 23/22 108/5 108/19 123/12
operation [1] 32/17
operational [5] 20/4
36/18 36/23 37/17 38/18
operations [2] 25/24
31/9
operatives [1] 83/1
operator [3] 21/16
21/18 145/22
opinion [6] 106/14 115/12 116/1 130/20 132/15 134/12

144/4 149/8 173/20
ought [6] 3/8 19/2
113/4 113/7 $117 / 7$ 118/4
our [11] 14/3 43/3
82/22 91/9 128/19
129/5 134/1 134/6
134/12 171/13 172/25
ourselves [1] 129/22
out [76] 2/3 2/7 5/2 7/1
7/7 8/14 9/10 9/11 10/8 13/20 16/18 16/21
18/17 19/7 19/10 20/25 22/3 26/2 27/8 28/17
31/4 34/14 40/23 42/8
42/12 42/19 43/2 43/21
44/19 48/3 48/14 49/1 52/20 52/23 54/15
62/17 64/6 64/8 67/10
70/24 76/24 77/9 81/22
82/12 85/18 86/4 86/21
86/22 86/23 87/13 88/1
92/24 102/7 105/12
105/21 113/10 120/10
121/15 131/5 143/10
145/1 146/23 148/10
148/20 152/19 153/1
153/7 155/9 155/20
159/5 162/17 163/13
165/22 168/18 170/22
172/19
outlets [1] 38/19
outline [3] 72/8 123/14
162/14
outlining [1] 1/13
outreach [1] 111/2
outset [2] 106/25
126/18
outside [3] 38/5 79/14 79/16
outstanding [2] 75/16 79/2
over [49] 2/16 11/2
11/11 12/5 12/7 12/19
14/19 20/14 21/10
23/13 23/23 28/10
29/19 34/14 35/20
38/22 41/3 42/24 43/18
43/23 44/4 46/5 49/4
49/14 62/22 64/2 66/23
67/13 68/2 68/3 68/7
68/8 77/13 87/14 88/6

89/6 89/10 92/16 93/25 97/20 101/7 118/22
125/19 128/16 129/12 137/3 153/8 156/19 165/14
overall [4] 3/256/22 58/22 67/9
Overarching [1] 73/6 overburdening [1] 27/22
overcome [2] 124/14 161/12
overloading [2] 27/8
149/3
oversaw [1] 82/3 oversight [4] 15/10 89/25 113/17 146/9 overturned [4] 98/11 98/19 99/4 100/5
overturning [1] 163/11
overview [3] 18/21
84/5 123/9
overwhelming [2]
150/23 150/24
owed [3] 72/1 75/20 85/11
own [18] $2 / 75 / 187 / 12$
17/16 18/1 26/17 28/5
52/18 52/19 52/20 56/1
90/17 91/8 120/8 138/3
138/12 144/5 156/2
ownership [2] 54/1
133/13

## P

package [1] 160/23
page [64] 4/11 4/24 6/14 7/3 9/7 19/5 21/3 21/9 21/10 22/5 23/11 23/13 25/23 28/3 29/5 29/21 30/9 31/12 32/2 33/24 33/25 34/12 34/15 37/8 37/16 38/22 38/22 41/2 41/3 41/3 42/15 54/10 62/7 62/7 63/22 64/2 64/2 73/7 73/8 84/4 84/18 87/9 88/5 88/7 108/17 109/11 110/5 115/3 118/22 122/15 122/19 128/15 128/16 129/12 132/18 133/18 136/4

| P |  | 59 | passage [2] 149/15 |  |
| :---: | :---: | :---: | :---: | :---: |
| page... [7] 139/4 | $1004$ | parish [1] 172/8 |  |  |
| 143/11 143/16 146/16 |  |  | past [3] 146/19 154/18 | performance [5] 9/4 |
| 48/15 151/19 167/8 | paragraph 119 [1] $150 / 25$ | 144/24 152/13 162/23 <br> Parker's [1] 163/1 | $\begin{aligned} & \text { past [3] 146/19 154/18 } \\ & 156 / 20 \end{aligned}$ | performance [5] 9/4 10/10 10/11 64/12 |
| page 10 [1] 29/5 | paragraph 15.1.3 [1] | Parliament [3] 53/10 | Pathway [13] 8/15 9/9 | $122 / 8$ |
| page 11 [2] 25/23 28/3 <br> page 13 [1] 115/3 | 28/22 | 103/2 135/17 | 9/22 10/14 13/20 21/6 | performing [2] 28/25 |
| [1] $37 / 16$ | paragraph 165.14 [1] | Parliamentary [2] | $11131 / 17$ 31/21 32/1 | 71/12 |
| page 16 [1] 38/22 |  |  | 38/25 64/ | haps [4] |
| page 2 [1] 88/5 | paragra | Parnell [1] 44/16 | Pathway's [5] $7 / 6$ | 131/12 134/25 173/14 |
| page 25 [1] 42/15 | paragraph 21.21 [1] | 14/23 25/24 30/ | pattern [1] 23/23 | $\begin{aligned} & 2] 11 / 1813 / 7 \\ & 1943 / 2444 / 8 \end{aligned}$ |
| page 3 [2] 62/7 139/4 | 133/19 | 31/18 34/14 43/1 | patterns [1] 151/7 | 45/14 46/24 59/3 66/23 |
| page 33 [1] 146/16 | paragraph 21.27 [1] | 54/22 61/16 65/8 7 | Paul [1] 157/2 | /14 68/25 69/9 69/1 |
| page 35 [1] 148/15 | 134/20 | 72/9 72/9 73/22 80/ | Paula [2] 111/16 | /16 69/24 70/1 71 |
| page 4 [1] 6/14 | paragra | 82/5 82/19 86/7 86/1 | 125/ | /13 74/11 74/16 8 |
| page 41 [1] 122/19 | 128/17 | 86/17 90/17 91/2 93/23 | Pauline [1] 12/12 | 102/6 102/17 |
| page 43 [1] 133/18 | paragraph 3 [3] | 99/10 122/21 123 | pause [2] 26/12 8 | 33/13 111/7 122/23 |
| page 49 [1] 128/15 | 21/11 31/13 | 123/17 124/12 125 | paused [1] 50/18 | 2/24 137/3 137/22 |
| ge 5 [5] 19/5 23/1 | paragraph | 126/8 126/10 129/2 | Pausing [1] 122/20 | 138/23 |
| 73/7 108/17 143/11 | 23/12 | 136/8 138/16 139 | pay [2] 34/18 168 | ds |
| 51 [1] 151/19 |  | 149/10 152/10 154/2 |  |  |
| page 6 [5] 4/11 21/3 |  | Participant [1] 9712 | pa | Peritas [3] 1/20 2/8 |
| 22/5 132/18 136/4 | paragra $115 / 20$ | Participant [1] $97 / 2$ <br> Participants [4] 118/6 | 41/7 62/17 79/3 98 payments [15] 6/8 | 9/21 <br> permission [2] 169/14 |
| page 7 [4] 7/3 21/9 109/11 143/16 | paragraph 4.1 [ | 70/20 171/4 | $\begin{aligned} & \text { payments [15] 6/8 } \\ & 6 / 1030 / 830 / 1161 / \end{aligned}$ | $\begin{aligned} & \text { permiss } \\ & \text { 169/17 } \end{aligned}$ |
| ge 8 [3] 31/1 | 3 | particular [26] 2/2 2/5 | 62/13 62/19 66/15 | permit [3] 45 |
| 8 | paragraph 4.3.2 [ | 21/24 23/4 28/22 31/16 | 67/12 68/10 97/16 | 120/19 |
| e 8 | 37/16 | 32/12 41/20 48/25 | 99/3 109 | person [7] 79/17 81/8 |
| page 9 [3] 32/2 37 | paragraph | 58/14 59/9 63/2 6 | 14/2 | /9 81/14 99/6 134 |
| 41/3 | 134/1 | 83/4 85/18 86/23 | PC | 144/15 |
| pages [1] 4/22 | paragraph 4.7 [ | 136/5 146/22 151/2 | PC0065021 | rsonal [1] |
| aid [1] 97/20 | 38/23 | 156/7 156/17 | PC0066391 [1] 63/2 | rsonally [1] 138/13 |
| Pamela [1] 12/ |  | 163/20 171/12 173/17 | PC0208119 [1] 39/1 | personnel [3] 153/9 |
| panel [1] 99/6 |  | particularly [8] 61 | PC033128 [1] 62/4 | 15 |
| paper [4] 53/4 55/10 |  |  |  | persons [2] |
| 79/24 105/15 |  | parties [4] 8/23 49/15 | Peak [14] 23/15 24 <br> 33/1 33/1 33/7 331 |  |
| paragraph [37] 4/12 | $\begin{array}{\|c} \text { paragra } \\ 118 / 23 \end{array}$ | $70 / 1693 / 5$ | 39/17 39/17 40/3 40 | $\text { pertinent [2] } 11 / 6$ |
| (1) 1 /11 10/12 21/10 | paragraph 7.2.2 [1] | parties' [3] 8/19 59/24 |  |  |
| 21/11 21/11 $22 / 523$ <br> 24/21 26/15 28/22 | 122/15 |  | PEAKs [3] 32/19 33/ | pervert [1] 120 |
| 31/13 31/18 37/16 | paragraph 7.3 [ | partly [1] 120 | 33/16 | Peter [1] 44/14 |
| 38/23 59/16 84/6 84/23 | 109/11 | partners [1] 128 | Itie | antom [15] |
| 96/17 105/20 | paragraph 7.4.1. | parts [3] 32/1 60/12 | pending [4] 49/8 76/13 | 3/11 63/12 64/1 |
| $1115 / 4$ 115/20 |  |  | 76/17 | 4/16 64/2 |
| 118/23 122/15 122/19 | paragrap |  | Penelope [1] 51/1 | 5/19 65/22 66/1 66/7 |
| /18 128/17 133/19 | 146/6 | party [11] 33/21 97/1 | penultimate [1] 4/12 | 66/9 66 |
| 134/1 134/20 139/5 | paragraphs [4] 2/13 | 111/18 127/5 152/19 | people [11] 2/12 12/23 | phase [26] 8/6 11/6 |
| $6150 / 25$ | 14/3 59/15 59/21 | 3/1 153/7 155/14 | /24 58/20 59/18 81/3 | 21 14/23 20/21 |
| paragraph 1.10 [1] | paragraphs 18 | 156/2 165/1 | 9 124/2 | 32/25 50/5 59/11 60/3 |
| 22/5 | 59/21 | pass [4] 10/17 10/20 | 173 | 21 |
| Paragraph 1.165.7 [1] | paragraphs 49 [1] | 19/12 28/10 | per [2] 10/14 155/5 | 82/22 86/17 89/1 89/11 |


| P | plainly [1] 75/21 | $\mathrm{PO}$ | POL00029245 [1] 29/6 | 93/11 109/16 115/24 |
| :---: | :---: | :---: | :---: | :---: |
| phase... [9] 89/17 | plan [1] 42/17 | 148/24 152/7 155/19 | POL00029282 [1] | 28/25 130/7 140 |
| 89/22 90/1 91/15 99/10 | planned [1] 42/13 | 156/12 | 36/24 | 140/16 142/23 1 |
| 103/8 122/21 170/7 | play [1] 15/8 | POL00000218 [1] | POL00029425 [1] | 48/8 148/24 152 |
| 172/12 | played [5] 35/24 71/16 | 105/18 | 29/11 | 65/20 |
| Phase 2 [2] 32/25 50/5 | 72/6 90/17 97/4 | POL00000912 [5] | POL00029650 [2] | positioned [1] 24/3 |
| Phase 3 [9] 8/6 11/6 | player [2] 15/7 163 | 25/22 28/3 31/8 3 | 106/2 108/17 | ns [3] 45/16 |
| 2/21 20/21 60/3 60/6 | players [1] 16/5 | 42/1 | POL00029677 | 73/3 74/2 |
| 82/22 89/1 103/8 | playing [1] 166/3 | POL00004403 [1] | 121/18 122 | positive [4] 9/13 9117 $115117158 / 3$ |
| Phase 4 [3] 73/22 | plea [3] 147/18 15 | $83 / 2$ | POL000298 | 115/17 158/3 |
| 86/17 89/11 |  | 144/25 151/19 | POLOOO | 3] $36 / 25$ |
| $\begin{aligned} & \text { Phase } 6[2] 60 / 14 \\ & 122 / 21 \end{aligned}$ | pleaded [2] 56/12 | POL00006394 [1] | 103/19 | 100/4 166/18 |
| Phase 7 [4] 14/23 | 56 | 157/15 | POL00030475 | le [15] |
| 90/1 170/7 |  | POLO000 |  | 100/17 108/21 12 |
| phases [14] 3/23 59 | 147/13 149/2 149 | 168/1 | POL00030562 [1] 73/7 | 2/1 132/7 13 |
| 59/23 60/13 89/3 89/5 | pleas [2] 157/24 | POL00006398 [1] | POL00032558 [1] | 138/2 152/4 152/2 |
| 89/6 89/8 89/11 | 158/13 | 167/11 | 74/24 | 153/3 153/11 154/8 |
| 16 131/16 170/3 | please [41] $2 / 10$ | POL00006401 | POL00032999 | 4/12 156/5 |
| 170/16 | 4/6 6/5 7/3 9/6 9/7 1 | 159/24 | 49/19 | possibly [1] 129/19 |
| Phases 2 [1] 89/5 | 21/3 21/10 23/11 23/1 | POL00006588 [2] | POL00036992 [1] 4/6 | post [318] |
| Phases 3 [1] 59/23 | 25/22 25/23 29/10 31/7 | 142/9 143/10 | POL00038870 [1] | Post Office [3] |
| enomenon [2] 66/4 | 31/12 32/3 32/4 33/23 | POL00006601 [1] | 44/22 | 141/5 157/14 |
| /8 | 33/24 34/12 37/15 | 162/20 | POL00038878 | Office's |
| ase [2] 124/20 | 38/22 40/21 41/4 | POL00006618 | /12 | 5/187/4 7/20 12/24 |
|  | 54/9 54/10 62/3 62/7 | 164/18 | POL00039024 [1] | 8/1 49/17 52/17 55 |
| ased [1] | 63/20 73/8 87/6 115/3 | POL00006769 | 77/18 | 5 57/15 |
| hysical [2] 45/17 | 118/22 128 | 139/2 | POL00039038 | t offices [1] 84 |
| $67 / 4$ | 129/12 134/20 173/24 | POL00006798 | 80/13 | nviction [1] |
| sically |  | 113/25 | POL00039748 [1] 2/10 | 158/23 |
| picked [1] 85/7 | [8] 25/10 99/20 | POL00006799 [ | POL00040868 [1] | Postal [1] 103/4 |
| ng [1] 83/21 | 99/22 99/24 $136 / 22$ | 118/19 | 142/24 | ded |
| [3] 79/24 1 | 11 | POL00006801 | POL00047544 [1] 87/7 | /12 |
|  | pocket [1] 88/1 | 137/14 | POL00088956 [1] 54/9 | postmaster [3] 81/2 |
| ot [1] 121/19 | point [23] 5/25 10/20 | POL00006802 [1] | POL00090227 [1] 4/19 | 82/10 103/21 |
| ing [4] 47/16 | 13/14 19/8 21/5 30/17 | 141/6 | police [1] 149/22 | postmasters [2] 78 |
| $548 / 4$ | 38/23 46/3 55/24 67/18 | POL00006803 [1] | policies [4] 16/1 72/17 | 159/8 |
| L[2] 32/24 33 | 67/19 72/19 84/191/8 | 140/9 | 73/4 90/10 | postpone [1] 34/17 |
| ICLs [6] 32/19 34/4 | 118/11 118/25 135/25 | POL00021562 | policy [12] 39/24 43/6 | potential [20] 28/19 |
| $734 / 13$ 34/16 35 | 136/2 143/13 143/23 | 167/19 | 43/16 72/11 73/6 73/14 | 34/23 38/16 57/25 |
| [1] $40 / 7$ | 144/13 155/22 165/8 | POL00022940 [1] | 89/13 129/18 150/1 | /116 60/19 62/21 63/8 |
| [17] 18/10 38/14 | pointed [2] 109/10 | 166/9 | 157/22 158/2 158/9 | 63/25 64/3 65/13 6614 |
| 40/13 43/10 53/19 | 159/5 | POL00023878 [1] | political [1] 90/7 | /294/15 94/22 95/ |
| 53/20 59/19 71/8 71/17 | pointing | 166/11 | poor [3] 23/2 24/22 | /5 107/2 155/1 |
| 98/10 101/1 | points [7] 4/17 22/13 | POL00024091 | 25/4 | 164/2 |
| 25 119/1 122/3 | 58/21 64/17 79/4 148/9 | 133/1 | pose [2] 122/8 151/21 | potentially [3] 27/9 |
| 151/4 152/14 | 164/12 | POL00026572 [1] 53/3 | position [33] 6/24 | 160/17 |
| placed [4] 75/9 | POL [13] 55/1 109/12 | POL00028212 [1] 9/6 | 45/17 46/1 48/17 72 | pounds [1] 53/13 |
|  | 109/15 119/13 119/19 | POL00028357 [1] 6/5 | 72/21 72/23 73/15 | power [5] 64/7 81/17 |
|  | 14 | POLO0028984 [1] | 0/18 | 86/12 100/2 110/15 |
| $139 / 25$ | $\begin{aligned} & 151 / 21 \text { 151/25 152/3 } \\ & 154 / 10156 / 10 \end{aligned}$ | $\begin{array}{\|l\|} \hline 35 / 14 \\ \text { POLOOO29 } \end{array}$ | 85/13 85/15 85/24 85/25 86/2 86/5 86/6 | powerful [1] 40/4 powerfully [1] 124/7 |


| P | principally [1] 60/13 |  | 158/5 | prosecutions [23] |
| :---: | :---: | :---: | :---: | :---: |
| 1] 25/17 |  |  |  | 56/23 57/2 57/6 58/1 |
| wers [1] 158/22 | 173 | 18/9 18/18 37/22 40/23 | 165 | 104/21 105/3 112/24 |
| cable [1] 24/7 | pri | 42/20 64/10 71/7 71/22 | profile [1] 157/17 | $3 / 1$ |
| practical [1] $138 / 1$ practice [8] 82/10 | prior [6] 5/21 43/20 | 108/5 108/19 108/22 | profits [1] 164/17 | $6 / 17126 / 24$ |
| $83 / 1285 / 1790 / 1$ | 66/23 67/24 135/17 | 123/12 134/7 135/2 | profound [1] 116/15 | 45/11 145/16 |
| 14/15 144/19 163/12 | 16 | 170/6 | program [3] 9/5 9/12 | 9/21 150/4 153 |
| 170/7 | priorities [3] 2 | pros | 9/20 | 157/15 |
| practices [5] 38/9 71/7 |  | pr |  | secutions' |
| 73/4 90/11 170/5 | prioritisation [2] | 5 | 2/4 3/2 3/5 3/5 | 90/10 |
| titioner [1] 165/3 |  | ceedings [5] | 4/9 5/21 6/2 | secutor [4] |
| [1] 160/10 | pri | 56/9 60/1 89/14 114/2 | 8/12 8/14 8/21 8/22 | 120/17 152/7 160/6 |
| e-trial [1] 160/10 | priority [6] 25 | proceeds [1] 131/1 | 8/25 9/23 12/24 4 | osec |
| ecautionary [1] | 26/8 26/4 | process [59] |  |  |
| 87/22 | prison [1] 144/20 | 19/7 20/13 20/14 20/18 | 44/21 46/9 46/11 48/25 | 141/3 142/14 148 |
| cedent [1] 1 | private [1] 149/21 | 36/17 36/23 37/20 | 50/15 61/18 74/14 | 160/9 |
| isely [1] 155/16 | privilege [2] 129/9 |  |  | secutors |
| [ |  | 72/14 74/19 75/10 | progress [5] 98/21 | 158/20 |
| [1] 2 | privileged [2] 37/2 | 75/18 76 | 98/23 99/2 99/9 12915 | spect [3] 150 |
| minary [1] |  | 76/14 76/16 76/2 | gressed [2] 51/1 | 9/15 |
| 12 | pris | 24 | 129/3 | ospects [1] |
| pare [1] 61/18 | 40 | 77/15 77/17 77/23 | prohibited [1] 39/2 | protect [1] 52/18 |
| prepared [2] 1/19 | pro | 78/18 78/22 78/24 79/1 | project [4] 1/21 13/1 | Protection [3] 38/6 |
| 73/14 | probably [1] 1 | 80/9 80/11 80/13 80/14 | 47/17 58/10 | 8/20 129/9 |
| preparing [1] 1 | problem [39] 6/11 | 80/17 81/14 82/2 82 | proof [2] 53/23 56/15 | protective [1] 65 |
| presence [2] 51/13 | 19/19 20/18 21/16 | 82/20 83/10 83/13 | proper [3] 120/1 | [ |
| 93/24 | 21/17 21/19 22/2 23/16 | 83/16 86/24 95/1 100/9 | 124/16 158/12 | ovide [15] 27/17 |
| nt | 23/24 24/19 25/3 26/6 | 109/17 111/5 122/16 | properly [13] 6/25 | 28/22 31/20 31/23 |
|  | 26/8 28/6 28/10 28/1 | 122/18 134/13 138/8 | 10/23 28/21 61/25 | 113 98/17 |
|  | 29/10 30/10 30/10 33/6 | 138/21 140/12 146/10 | 64/19 66/12 120/12 | 99/12 105/25 116/6 |
|  | 35/20 35/22 40/2 40/19 | 159/4 173/11 | 120/13 127/8 127/23 | 123/25 140/6 156/23 |
|  | 41/13 41/18 54/17 62/9 | processes [16] | 150/19 158/25 161/21 | 162/11 173/2 |
|  | 63/15 69/4 69/19 70/2 | 18/18 36/2 41/17 53 | proportion [1] 98/2 | vided [71] |
| [1] 1 | 84/5 | 1610 | proportionate [3] | 4/20 7/25 11/3 11/5 |
| press [2] 67/18 111 | 110/23 125/18 151/10 | 121/22 123/9 130/1 | 16/11 60/24 146/12 | 13 12/8 12/19 |
| pressed [1] 67/19 | 17 | 137/12 137/14 155 | proportionately | 15/2 15/6 15/23 |
| pressing [1] 78/24 |  | 160/6 160/10 | prop | 16/22 16/24 17/7 17/10 |
| pressure [2] 24/1 | problems [36] 19/16 | processing [5] 26/5 | proposed [2] 52/4 | 17/11 17/15 19/14 |
|  | 19/24 21/6 25/2 26/10 | 41/1 95/20 110/16 | 106/23 | 20/22 23/2 27 |
|  | 27/9 27/21 28/2 28/8 | 123/13 | propriety [1] 158/5 | /10 32/10 32/18 |
|  | 31/21 33/16 33/20 | produced [12] 41/5 | prosecute [1] 73/25 | 3/13 33/22 43/16 |
|  | 50/21 70/9 103/1 | 50/25 53/1 55/20 58/10 | prosecution [25] | /20 102/2 109/23 |
|  | 108/23 109/13 110/7 | 60/1 77/9 92/17 107/1 | 51/15 97/13 100/18 | 4/5 114/23 116/9 |
| $6] 81$ | 110/21 111/5 112/15 | 119/17 135/22 151/18 | 100/22 102/9 113/19 | 23/19 128/11 128/22 |
|  | 113/5 122/24 124/8 | Product [7] 48/21 | 115/9 115/10 116/7 | 129/11 129/14 129/15 |
|  | 124/20 124/22 124/25 | 52/22 75/14 76/2 77/19 | 118/3 127/10 127/12 | 129/16 129/22 135/12 |
| $18 / 527 / 1530 / 16$ | 130/17 133/25 134/17 | 79/14 81/16 | 6 137/6 138 | 137/11 140/4 140/8 |
| 129/13 129/21 1 | 134/25 136/12 145/24 | products [6] 47/22 | 139/20 139/24 141/5 | 141/4 142/4 144/22 |
|  | 155/21 157/4 173/21 | 48/7 83/6 84/3 130/1 | 14 | 145/12 147/6 149/25 |
|  | procedural [1] 92/18 procedure [9] 40/22 | pro | $\begin{aligned} & \text { 148/12 } 150 / 1 \text { 150/ } \\ & 160 / 8 \end{aligned}$ | $\begin{aligned} & 151 / 25153 / 22153 / 25 \\ & 154 / 13156 / 17156 / 21 \end{aligned}$ |

(71) PowerHelp - provided

P
provided... [10] 159/19
161/6 161/20 161/23
162/5 164/1 164/7
164/9 167/7 167/18
provides [3] 22/10 31/16 134/7
providing [5] 23/20 31/25 60/10 126/11 134/15
provisional [1] 171/13 public [5] 119/15 122/4 151/24 159/2 160/2
publication [1] 135/17 published [3] 111/13 121/16 123/23
purely [1] 151/9 purpose [7] 13/16
37/10 122/11 133/7 133/15 133/21 145/6
purpose' [3] 134/2
134/12 135/6
purposes [5] 30/17
82/22 102/3 126/21

## 137/7

pursue [4] 58/11 58/18 139/14 167/25
pursued [2] 100/9 147/19
pursuing [3] 158/18 164/15 164/16 pursuit [1] 59/25 pushed [2] 42/8 46/6 put [6] 5/6 46/1 54/15
56/10 69/11 98/9
putting [1] 86/8
puzzling [1] 87/14

## Q

qualifications [1]
71/11
qualified [4] 14/17 152/19 153/1 153/7
quality [5] 6/4 8/3 33/13 121/21 122/17 quantum [1] 168/18 quashed [5] 98/15 100/25 101/3 101/4 139/20
Queen's [2] 145/1 164/4
queries [2] 19/12
120/20
question [13] 58/25
70/15 71/24 84/15 85/1 85/6 96/8 115/6 133/22 140/2 148/1 161/5 164/25

## questioning [1]

160/19
questionnaire [1] 9/14 questions [11] 14/12 58/15 58/16 59/9 72/2 172/10 172/13 172/16 172/17 172/25 173/16 quick [1] 17/13 quickly [4] 27/21
42/19 54/23 172/1
quiet [1] $3 / 16$ quite [3] 170/15
171/14 172/14
quote [1] 115/6
quoted [1] 111/15
quotes [1] 117/17

## R

Radio [1] 124/1
Radio 4's [1] 124/1 raise [6] 18/22 30/20 36/10 52/9 75/17 110/25
raised [34] 4/1 6/3
12/15 22/24 27/4 28/12 29/14 29/15 34/5 57/19 65/5 74/20 79/19 83/5 84/1 107/13 109/17 112/2 114/13 117/21 122/25 129/9 130/21 130/22 131/19 138/2 143/14 151/3 152/11 155/25 156/19 156/25 162/25 171/12
raising [6] 40/19 41/8 76/20 105/17 126/14 155/2
range [8] 12/24 17/13
90/3 109/8 134/14
151/16 164/8 165/3
ranges [1] 164/11
ranging [1] 122/3
rate [2] 10/19 10/20
rather [16] 24/17 41/14
49/1 56/20 56/24 57/4

64/16 64/22 79/11 92/18 108/5 116/11 145/21 151/6 154/17 173/18
rating [1] 9/13
rationale [1] 160/18
reached [3] 71/15
106/7 148/16
reaction [1] 78/16
read [8] 6/20 25/9 39/6
56/5 57/1 163/24 163/25 164/9
reader [1] 115/1
readily [2] 147/12 147/16
readiness [2] 12/21 13/19
reads [1] 64/2
real [9] 23/20 74/8
77/1 100/4 148/17
151/21 160/4 166/18 169/14
realising [1] 51/21
realistic [1] 150/18 realistically [1] 47/4
really [2] 26/17 64/19
realtime [1] 53/23
reason [12] 4/23 9/2
45/22 52/7 88/18
116/17 116/23 127/9
127/15 129/10 141/16 169/15
reasonable [5] 146/12 164/21 165/3 167/12 171/6
reasonably [6] 107/5
145/7 146/18 147/1
148/19 171/5
reasoned [1] 106/14 reasons [11] 8/18 10/3 33/9 50/2 88/13 105/14 106/7 115/21 117/14 169/18 169/19
reassure [2] 105/18 126/14
reattempt [1] 68/1
Rebecca [1] 102/25
rebuild [1] 96/7
recall [5] 49/6 56/4
73/16 115/10 126/12 receipt [1] 35/8
receipts [11] 6/8 6/9

29/16 30/12 41/7 61/4 66/15 67/12 68/10 109/2 114/20
receive [2] 9/12 32/16 received [17] 8/4 12/14 12/17 15/16 22/23 48/13 98/4 112/9 129/1 134/8 140/24 153/24 163/25 164/20 172/13 172/14 172/21 receiving [2] 35/7 129/7
recent [1] 114/10
recently [3] 1/23 99/7 159/4
recognise [1] 133/22
recognised [2] 123/17
128/25
recognition [1] 24/5
recommend [4] 24/2
141/17 151/1 166/8
recommendation [2]
104/22 155/23
recommendations [14]
24/12 90/2 106/10
106/11 106/13 121/17
124/14 141/19 150/3
154/16 162/24 163/2
170/6 170/13
recommended [5]
79/16 152/18 154/10 156/10 166/12
recommending [1]
164/16
reconciliation [10]
20/1 24/20 25/6 40/17
40/20 40/21 40/24 41/2 41/6 44/24
reconsider [1] 148/12
record [13] 21/13 33/4
35/6 56/22 57/2 58/4
67/5 95/1 101/23
118/20 119/24 120/16
134/13
recorded [5] 64/21
95/19 141/22 154/6 168/23
recorder [1] 141/24
recording [2] 121/5
122/13
records [11] 51/3 51/5
51/16 65/10 94/5

126/25 127/3 132/16 151/13 153/4 155/16 recover [6] 73/24
75/16 79/24 80/9 135/2 147/16
recovering [2] 79/1
79/20
recovery [14] 44/25
45/2 45/2 75/15 75/18
76/12 76/14 79/9 79/11
80/3 82/19 83/7 84/2
110/1
rectification [5] 15/9
17/2 19/24 32/13 42/20
rectified [2] 34/25
87/17
rectify [7] 8/25 19/13
27/4 48/11 59/20 77/25
78/11
recurring [1] 131/3
recusal [17] 165/8
165/10 166/13 166/21
166/23 167/9 167/25
168/6 168/8 168/15
168/17 168/20 168/22
168/25 169/1 169/5
169/20
recuse [4] 93/14 167/6
167/14 167/15
red [1] 22/12
redress [3] 15/15
89/17 99/14
reduce [2] 24/4 133/13
reduced [1] 171/8
refer [13] 2/20 4/18
16/6 16/11 27/7 59/8
65/1 66/6 79/13 80/15
100/2 117/15 162/1
reference [25] 17/13
20/2 20/3 20/16 29/5 29/20 41/10 41/12
109/11 110/5 115/18
122/14 122/19 127/13
132/18 133/1 133/18
144/24 146/16 148/15
154/8 154/11 155/22
160/17 160/20
References [1] 134/3
referral [1] 79/16
referred [44] 1/17 2/22
4/14 4/16 5/25 7/16
11/5 15/21 16/9 18/3

## R

referred... [34] 21/22 22/12 32/24 33/3 33/7 35/19 36/22 37/3 39/9 39/18 41/19 43/19 56/2 56/11 61/12 65/3 80/25 81/8 84/1 91/13 92/21 98/11 100/7 103/1 113/12 114/4 114/14 118/20 118/24 132/21 163/17 163/20 173/2 173/8
referring [2] 27/5 113/13
refers [5] 2/15 61/23 86/1 118/23 165/18
reflect [1] 156/6 reflected [2] 128/22 138/19
reflection [1] 157/8
reflects [1] 73/15
Refocus [1] 45/2
refresher [1] 13/23
refuse [1] $81 / 20$
refused [1] 169/16
refute [1] 55/23
regard [10] 33/12 94/9
109/10 136/13 147/5
147/23 149/25 154/16
161/18 163/23
regarding [10] 6/4
21/15 53/2 68/17 71/8
103/11 112/3 128/1
130/5 153/24
regards [1] 43/7
register [1] 35/7
regression [1] 34/19
regrettable [1] 129/20
regularly [1] 164/8
reinforced [1] 165/21
reintroduce [2] 54/21
54/25
reiterate [3] 18/19 136/1 172/19
rejected [1] 169/10
relate [3] 66/3 84/13
134/8
related [7] 26/10 92/18 105/22 118/5 118/7 120/20 126/24
relates [2] 46/14 59/15 relating [22] 1/13 32/1

33/10 56/17 62/14
83/24 88/14 89/11 92/11 94/24 106/11 113/21 118/2 121/20 122/5 126/23 127/1 127/3 128/24 132/5 138/24 140/1 relation [20] 6/1 14/9 14/13 14/15 29/16 32/25 34/6 82/16 83/7 99/1 102/8 103/8 139/9 remote [18] 36/5 36/7 139/16 139/18 140/7 146/19 155/25 162/11 168/4
relational [1] 93/4
relationship [3] 18/10 76/19 156/13
relative [1] 16/25
relayed [4] 57/20
118/17 119/5 119/14
release [5] 20/15 39/3
42/9 42/13 63/3
releases [3] 34/8
34/18 46/11
relevant [23] 15/7
15/17 29/7 32/11 33/6 49/22 58/20 59/23
61/19 70/16 71/8 77/24 86/14 107/17 108/19 128/11 132/17 138/16 145/21 150/16 152/20 157/3 170/10
reliability [3] 58/3
94/25 156/19
reliable [1] 48/12 reliance [2] 101/20 147/7
relied [11] 20/3 53/18 55/11 55/14 97/5 114/3 140/19 147/23 162/6 164/20 169/24
relief [1] 97/22
rely [2] 7/12 96/1
remain [3] 53/14 $117 / 1$
135/9
remainder [6] 19/9
23/19 24/9 25/20 101/7
171/1
remained [1] 7/7
remaining [1] 89/2 remains [1] 80/14 remarks [1] 129/23
remedies [1] 120/21 remedy [2] 77/6 94/7 remedying [1] 48/1 remember [2] 78/12 171/10
remind [1] 90/23
reminder [1] 9/8
remit [6] 106/1 106/9
107/17 130/3 130/20
157/20
36/8 36/11 36/25 37/4
39/8 39/12 39/16 40/8
40/11 127/21 128/1
132/19 132/23 133/2
136/12 152/8
remotely [10] 54/16
54/20 54/24 55/5 94/3
94/4 96/13 132/10
151/14 161/17
remove [2] 43/17 44/1
removed [3] 45/21
79/17 80/16
removing [1] 51/22
remuneration [1] 85/3
rendering [1] 155/19
repaid [3] 83/17 85/22
156/15
repairable [1] 135/3
repay [2] 85/24 86/6
repaying [1] 85/10
repayment [2] 93/17
158/17
repayments [1] 85/4
repeat [3] 70/12 172/2
172/8
repeated [5] 8/5 107/6
131/13 133/11 157/7
repeating [1] 35/10
repellency [3] 130/14
133/7 134/14
replicated [1] 6/12
reply [1] 54/11
report [69] 22/3 28/23 30/12 39/9 39/9 51/12 51/17 54/7 54/13 55/20 57/11 79/16 79/23 87/4 87/15 88/17 89/18 101/9 101/9 101/12 101/13 101/24 103/9 103/16 103/17 103/25 104/25 105/4 106/2

106/8 106/9 106/13 106/25 108/1 108/7 109/8 111/13 112/11 112/21 112/22 114/12 114/13 119/13 121/13 121/16 121/24 122/2 122/6 123/2 123/4 123/17 123/22 123/24 125/25 126/7 126/8 126/10 126/13 129/24 131/9 133/6 133/15 135/13 135/18 137/9 137/9 145/19 146/1 157/9
Report's [1] 110/2 reported [11] 63/6 97/23 103/2 106/21 109/9 109/13 109/15 110/21 131/21 133/25 149/12 reporting [2] 45/11 123/12
reports [20] 41/1 41/2 41/5 41/10 41/11 41/12 41/13 44/20 102/25 103/7 103/14 103/14 107/23 114/8 135/22 149/16 151/17 151/17 152/5 153/14
repository [1] 118/5
represent [2] 128/8 167/20
representation [2]
99/1 166/2
represented [4]
120/25 129/18 161/24 162/8
representing [1] 137/4
represents [1] 125/17
reputation [3] 52/18
103/24 148/17
request [7] 21/14
36/19 74/25 81/12
85/15 105/22 139/25 requested [2] 77/10 161/17
requesting [2] 84/22 85/14
requests [6] 12/22
17/21 40/8 52/11 60/8 129/8
require [2] 12/20 112/3
required [12] 32/12
34/5 37/24 39/23 44/2
45/15 47/15 82/10
109/20 118/10 120/13
141/15
requirements [4] 9/10 22/4 38/24 49/18
requiring [1] 37/22
research [1] 127/23
resolution [10] 12/20
15/12 40/17 64/5 64/7
64/9 70/19 71/4 72/19
112/4
resolve [16] 13/6
19/12 19/16 20/10
21/17 21/19 27/18
27/20 28/2 43/5 75/24
76/1 82/13 83/9 99/7
109/16
resolved [6] 7/18 7/23
36/4 54/19 63/3 93/9
resolves [1] 31/21
resolving [4] 36/1
60/11 75/23 76/7
resource [5] 7/12 24/7
27/11 27/18 80/1
resources [1] 39/23
respect [41] 3/23 4/14
9/25 10/5 13/8 14/2
18/5 23/5 28/8 33/7
36/10 63/14 79/9 88/22
90/15 97/4 98/22 101/1
102/22 103/17 104/9
108/8 126/11 127/7
127/19 128/3 128/13
131/1 138/4 138/15
145/17 146/15 147/10
150/3 155/24 156/2
160/24 161/12 161/25
163/12 167/5
respect of [3] 103/17
156/2 167/5
respective [1] 120/3
respectively [2] 92/23
95/17
respects [1] 155/10
responding [3] 53/12
89/20 136/7
responds [1] 34/13
response [21] 53/2
54/7 76/13 76/17 76/18
81/8 87/3 102/14 103/7

| R | 152 |  | $\mathrm{Rc}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| response... [12] |  | 0 | 1 | 143/12 170/3 170/ |
| 103/10 107/3 110/2 | reversing [1] 103/22 |  | Royal Mail [1] 128/5 rule [7] 12/22 17/20 | says [14] 4/13 11/12 |
| 123/19 124/17 125/3 | reversing [1] 103/22 review [96] 22/14 | $\begin{aligned} & \text { rise [3] 107/20 110/10 } \\ & 110 / 16 \end{aligned}$ | rule [7] 12/22 $17 / 20$ 40/8 52/11 60/7 85/15 | $\left\lvert\, \begin{gathered} \text { says [14] } 4 / 1311 / 12 \\ 12 / 317 / 1134 / 837 / 17 \end{gathered}\right.$ |
| $\begin{aligned} & 131 / 3131 / 4136 \\ & 162 / 12162 / 191 \end{aligned}$ | 22/17 43/11 52/21 | risk [9] 38/18 87/18 | 88/2 | 39/21 54/12 75/4 78 |
|  | 52/23 53/5 67/25 77/17 | 95/10 95/13 95/18 | Rule 9 [5] 12/22 17/20 | 3 |
| $129 / 7$ | 80/11 89/18 89 | 130/9 159/20 16 | -82/11 60/7 | 168/3 |
| responsibilities [ | 101/14 102/7 102/ | 160/2 | Rules [1] 92 | scale [2] 26/2 1 |
| 28/4 32/3 32/5 89/15 | 102 | risks [6] | 0/4 84 | [7] |
|  | 107/3 107/15 107/4 | 42/12 122/8 130/1 | running [3] 5/2 6/22 | 89/20 125/3 136 |
| 73/12 75/24 | 111/19 111 | 160/2 | 50/12 | 162/12 162/19 163/8 |
| responsible [10] 13/16 | 11 | RM | runs [3] 4/22 8/ | scanning [1] 61/19 |
| 40/18 40/25 |  |  | S | scenario [1] 82/25 |
| 42/11 52/11 71/10 | 138/1 138/6 138/13 | robustness [1] 114/24 |  |  |
| 125/4 146/4 | 138/15 138/20 140/9 | Rod | sabotage [1] 124/9 | scheme 26 |
| rest [1] 47/5 | 140/10 140/12 140/1 | role [28] 21/23 28/8 | saddened [1] 1/2 | 89/19 91/20 98/11 |
| restart [1] 135/2 | 141/5 144/22 145/5 | 29/8 30/22 30/24 31/4 | safe [1] 148/23 | 88/11 98/12 98/11 |
| restrict [1] 38 | 145/6 145/9 14 | 35/23 36/6 40/4 71/ | safety [6] 102/20 | 98/20 99/2 |
|  | 146/7 146/13 146/15 | 71/16 72/7 72/15 72/16 | 145/17 146/22 150/7 | 99/5 111/15 112/1 |
|  | 146/20 146/22 147 | 97/3 102/9 116/1 | 20160 | /7 |
|  | 147/6 147/9 | 123/6 136/5 | said [34] 11/15 11/2 | /124 126/6 1391 |
|  | 147/23 148/8 148/9 | 140/5 140/14 141/5 | 15/18 24/18 55/11 | 39/13 152/21 154/2 |
| 38/18 4 | 148/12 148/14 148/2 | 141/18 142/1 14 | 19 75/13 7 | 155/2 155/5 1 |
| 381/ | 149/1 149/19 150/3 | 160/25 169/22 | 19 91/1 108/1 | schemes [3] 89/21 |
| 2513 | 150/14 150 | roles [3] 15/9 27 | 109/3 109/5 122/7 | 98/ |
| /21 158/18 165/15 | 151/11 151/16 152/12 | 141/3 | 124/15 12 | scope [7] 3/16 4/25 |
|  | 152/13 152/17 153/1 | roll [10] 13/20 42/12 | /19 124/24 12 | 113/10 115/22 |
| resultant [2] 13 | 153/7 | 43/23 44/4 62/22 67/13 | 132/9 133/8 135/8 | 129/24 130/20 |
|  | 154/23 154/25 155 | 68/2 68/2 68/7 68/8 | 135/20 143/5 145/6 | Scott [1] 121/25 |
|  | 155/8 155/10 155/ | rolled [4] 8/14 42/18 | 145/22 147/25 168 | screen [11] 5/7 23/1 |
|  | 155/15 155/23 156/ | 43/18 43/21 | 170/17 172/2 172/3 | 29/24 39/20 64/5 64/7 |
| $\begin{aligned} & 48 / 25111 / 313 \\ & 146 / 4163 / 10 \end{aligned}$ | 156/11 156/17 157/2 | rolling [1] 66/2 | 3173 | /24 70/23 84/23 |
|  | 157/8 157/13 157/1 | rollout [10] 1/18 | same [19] 13/7 | /12 17 |
| $199$ | 157/20 158/11 162/2 | 11/1 11/24 13/8 13/17 |  | scroll [3] 30/9 73 |
|  | 16 | 13/19 22/25 49/25 | 04 | 88 |
|  | reviewe |  |  | scrutiny [1] 160/7 |
| retain [4] 24/9 101/23 | 113/14 134/18 138/22 | Romec [2] 65/10 65/18 | 126/1 132/18 142/2 | Scully [1] 157/3 |
| 118/20 120/17 | 315 | Ron [1] 105 |  | d [1] 153/10 |
| ained [5] 118/9 | reviewing [2] 48/15 | room [1] |  | chable [1] 27/12 |
| /14 119/4 120/12 |  | root [3] 61/11 62 |  | ching [1] 151 |
|  | re |  |  | [ |
| [1] 1 | 107/11 107/21 108/2 | Rose [11] |  | cond [110] 3/4 |
| return [5] 36/862/17 | $108 / 7146 / 1$ |  |  | $5 / 25$ 7/10 9/2 |
| 121/13 147/18 150/9 | revised [1] 150/1 | 104/9 104/10 |  | /14 19/20 21/11 |
| returned [2] 75/8 | right [10] 1/9 4/12 23 | 104/15 112/21 114/12 |  | /20 27/5 27/23 28 |
|  | 26/18 129/1 133/3 | 137/9 | saw [3] 66/9 151 | /8 31/18 32/7 32/25 |
| rning [2] | 161/3 169/1 |  |  | 14 33/24 39/1 |
|  |  | route [2] 21/19 |  | /10 56/2 63/10 |
| returns [2] 5 | rigidly [1] 173/19 rigour [1] 122/18 | routed [1] 73/3 routinely [1] 26/16 |  | $\begin{aligned} & \text { 72/11 79/21 82/17 84/6 } \\ & 89 / 1890 / 5101 / 12 \end{aligned}$ |

## S

second... [78] 101/22 101/24 105/4 105/4 105/10 105/11 105/21 105/25 106/1 106/8 106/14 106/16 106/25 107/10 107/23 108/1 108/10 108/20 108/25 109/8 109/15 110/6 110/9 111/20 111/21 112/6 112/13 112/22 114/13 114/19 122/6 123/2 123/3 123/16 124/13 125/10 125/11 125/23 126/1 126/7 126/15 126/25 127/7 127/16 127/19 128/1 128/3 128/13 129/25 130/3 130/4 130/20 130/25 131/19 131/24 132/10 132/19 133/15 135/7 135/13 135/18 135/22 136/10 137/9 142/11 142/12 142/23 143/6 143/8 144/13 145/11 145/19 145/23 147/8 151/17 152/5 155/25 156/4
Second Sight [46] 89/18 90/5 101/12 101/24 105/4 105/11 105/21 105/25 106/14 106/16 107/10 107/23 108/1 108/10 108/20 108/25 109/8 109/15 110/6 111/20 111/21 112/6 112/13 112/22 114/13 114/19 122/6 123/2 123/3 123/16 124/13 125/10 125/23 126/1 126/7 126/15 127/7 127/16 127/19 130/3 130/20 130/25 136/10 145/19 155/25 156/4

## Second Sight's [5]

 106/8 106/25 128/13 129/25 130/4secondly [19] 3/16
7/22 10/23 16/13 38/3 67/23 74/6 78/18 79/7 94/1 96/2 98/11 100/11

101/12 109/4 130/9
$150 / 13152 / 25159 / 9$ secret [1] 124/11 Secretary [2] 125/15 135/19
section [8] 14/9 30/10 44/23 73/9 75/4 84/2 133/6 154/23
secure [3] 37/19 38/5 91/22
security [12] 37/20
38/24 39/3 39/4 39/9
39/24 40/13 101/10 103/19 119/12 121/20 121/25
see [49] 4/6 5/7 6/6
7/10 13/17 20/19 23/9 23/10 28/3 29/12 29/13 30/2 30/4 30/9 30/19 30/21 34/7 35/13 36/12 39/21 41/2 42/14 46/11 46/12 47/7 47/11 48/5 49/14 53/3 63/24 64/20 68/22 73/7 83/2 84/4 84/19 84/22 85/8 85/12 88/11 104/18 118/17 124/4 124/5 124/16 141/21 142/24 165/16 173/25
seek [11] 19/12 116/1
117/21 121/3 153/20 160/16 163/3 166/13 167/15 168/20 168/22
seeking [1] 160/11
seem [1] 28/15
Seema [2] 139/10 139/19
seemed [1] 131/6
seemingly [2] 150/22 155/8
seems [9] 12/17 64/24
83/18 87/25 88/1
133/12 138/10 151/20
154/2
seen [7] 22/6 22/13
104/25 106/15 141/8
144/12 159/7
segment [1] 124/2
select [2] 72/12 125/9
selected [4] 75/12
90/12 114/10 157/17
selecting [1] 158/22
selection [1] 92/10
sell [1] $47 / 22$
send [1] 30/21
sending [3] 35/6 35/12 52/11
senior [13] 13/1 50/11 90/6 90/19 92/13 105/8 129/19 132/25 137/6 137/7 159/5 161/1 169/23
sense [5] 34/17 45/23 83/19 92/7 151/5
sensible [1] 23/22
sensitive [3] 38/7 128/24 140/2
sent [13] 12/22 17/20 35/7 40/7 50/5 51/17 $74 / 2576 / 1884 / 20$ 85/14 85/15 168/11 172/19
sentence [5] 104/12 142/22 143/3 143/18 144/20
sentenced [1] 144/8
sentencing [1] 158/22
separate [4] $4 / 15$
20/18 72/8 118/19
separately [1] 92/12
September [2] 123/20
139/3
series [7] 4/8 40/19
40/25 59/2 63/14
103/25 168/7
serious [11] 27/9
120/2 122/8 142/20
143/1 144/12 144/17
149/7 155/2 165/10
169/2
seriously [1] 131/18
seriousness [2] 144/4 148/2
service [34] 16/6 18/2
18/5 18/13 19/10 19/11
19/23 20/23 20/25
21/25 22/4 22/10 22/17 22/18 23/2 23/21 23/25 26/12 27/3 28/6 28/21 31/23 31/24 32/1 32/23 33/11 33/13 38/19 41/1 65/6 66/6 69/22 76/6 85/13
services [33] 15/6

16/2 16/14 16/17 16/22 sheet [1] 149/3 16/24 17/1 17/17 18/8 shielding [1] 65/12 18/12 18/15 18/18 shifted [1] 20/14 18/21 20/4 21/8 25/14 shoot [1] 50/13 25/20 25/24 31/9 31/10 short [4] 47/9 99/23 31/11 32/10 32/18 115/7 136/23
33/20 38/16 64/25 69/1 shortage [1] 88/15 91/22 105/10 113/22 shortages [1] 131/6 116/14 130/11 134/15 shortages' [1] 109/13
sessions [1] $4 / 3$
set [30] $8 / 99 / 99 / 25$
16/18 16/21 19/7 20/25
22/13 28/17 34/14 43/2
44/19 47/12 65/8 67/21
68/6 76/24 77/9 81/22
91/21 92/24 113/10
120/10 124/10 143/10
163/13 168/7 169/18
171/13 172/13
sets [5] 7/7 9/11 26/2
40/23 85/18
setting [2] 18/17 22/3
settle [11] 44/3 44/9
72/12 74/6 74/16 74/24
78/25 79/6 79/25 81/24
160/11
settled [6] 55/21 57/24
75/11 80/4 85/23 96/21
settlement [17] 44/24
96/23 97/6 97/7 97/8
97/11 97/11 97/15
97/16 98/2 159/20
159/21 160/7 160/18
160/23 161/2 161/3
Settling [1] 160/11
seven [1] 41/5
Seventh [1] 102/16
several [6] 13/2 15/7
32/11 63/19 132/11
154/3
shadow [1] 136/1
shall [2] 47/4 136/18
shape [1] 44/18
shared [7] 97/24
121/22 128/20 149/12
149/16 157/10 157/10
she [14] 2/15 51/3 51/7
51/14 51/24 51/25
54/11 54/19 84/5 103/1
104/16 124/4 140/3
140/5
shedding [1] 119/22
shortcomings [2] 22/15 122/7
shortfall [7] 74/20
75/19 78/2 80/7 93/18 95/14 98/10
shortfalls [15] 44/2
46/2 46/17 58/1 71/9
71/22 72/22 73/19 93/6
94/13 94/23 95/24
131/4 159/11 164/16
shorthand [1] 47/1
shortly [7] 27/14 28/17
96/21 104/2 123/22
125/7 167/23
shortsighted [1] 159/9
should [40] 3/14 8/19
10/6 21/18 27/1 27/10
39/16 45/15 48/20
48/24 51/24 71/19 76/1
77/11 81/18 82/7 90/25
98/25 104/16 116/5
116/10 116/11 116/18
116/25 118/6 119/9
128/9 137/23 138/1
138/13 140/3 140/13
141/17 153/16 153/18
153/18 165/8 167/25
168/17 173/13
shoulders [1] 121/2
show [10] 10/21 10/22
10/23 18/19 41/6 64/21
68/5 69/24 80/13
161/13
showed [2] 74/3 95/4
showing [7] 55/20
68/9 72/22 73/19 80/8
93/7 169/14
shown [9] 10/13 53/10
74/2 74/9 86/15 93/18
124/13 149/13 149/18
shows [1] 21/22
shredding [1] 118/21
sic [1] 85/21

## S

Sift [1] 113/13
Sight [68] 89/18 90/5 101/12 101/24 105/4 105/10 105/11 105/21 105/25 106/14 106/16 107/10 107/23 108/1 108/10 108/20 108/25 109/8 109/15 110/6 111/20 111/21 112/6 112/13 112/22 114/13 114/19 122/6 123/2 123/3 123/16 124/13 125/10 125/12 125/23 126/1 126/7 126/15 127/7 127/16 127/19 128/2 128/3 130/3 130/20 130/25 131/20 131/24 132/10 132/19 135/8 135/13 135/18 135/22 136/10 137/9 142/11 142/13 142/23 143/6 143/8 144/13 145/19 145/23 147/8 151/17 155/25 156/4
Sight's [7] 106/2 106/8
106/25 128/13 129/25
130/4 133/15
sign [2] 37/22 160/12
sign-off [1] 37/22
signatures [1] 151/24
signed [1] 105/19
significance [1] 147/2
significant [32] 11/3
14/1 17/6 24/24 36/6
60/5 84/14 87/18 95/10
96/19 101/20 104/3
105/1 108/15 123/12
124/12 126/19 128/6
130/2 131/19 132/20
135/15 136/8 139/23
144/21 152/11 154/2
156/5 163/17 164/6
168/10 169/9
significantly [5] 16/23
88/1 91/16 129/25
173/11
similar [7] 14/12 40/20
63/6 80/14 110/24
131/15 140/3
Similarly [1] 116/8
Simon [3] 101/18

105/1 112/24
simply [5] 4/18 68/23 88/3 88/15 110/22
since [4] 24/8 48/11 98/10 113/14
single [6] 13/20 21/5 58/24 61/11 109/7 $118 / 4$
sir [32] 1/7 1/12 4/15 5/8 9/8 18/24 40/10 46/25 47/6 71/2 90/23 98/8 99/7 99/16 99/21 102/11 103/6 112/7 136/14 136/20 136/25 143/4 144/14 159/2 161/22 162/1 170/3 170/7 170/14 170/16 171/7 173/23
Sir Anthony [4] 112/7
143/4 144/14 159/2
Sir Jonathan [2]
102/11 161/22
site [4] 12/6 65/11
65/19 65/22
sites [1] 35/17
sits [1] 159/16
sitting [2] 24/10
166/19
situation [4] 48/11
110/17 135/3 154/20
six [5] 12/1 $12 / 5$ 14/3
87/10 92/17
six days [1] 12/1
six months [1] $12 / 5$
six paragraphs [1] 14/3
sixth [4] 87/5 92/21
102/11 111/7
size [3] 56/15 87/21 88/3
Skills [2] 125/9 135/20
slide [1] 80/13
slightly [2] 66/5 96/18
small [4] 18/19 124/19
127/1 146/13
SMC [14] 19/15 19/17 27/24 28/4 28/7 28/13 28/16 28/24 29/4 29/9
30/18 30/20 30/22 31/4
SMC/counter [1] 30/20
Smith [1] 52/25
snapshot [5] 61/16

61/18 62/1 62/18 62/22
snapshots [1] 63/5
so [75] 1/10 1/23 3/17 4/5 4/12 5/7 6/24 11/6 14/17 14/20 16/4 16/21 17/9 19/7 20/22 24/16 25/2 27/7 29/21 30/7 44/1 47/2 47/4 47/16 51/21 53/24 55/1 59/2 61/6 62/1 62/25 71/18 72/17 75/1 76/6 85/15 86/3 86/7 89/9 91/5 100/6 100/22 100/24 104/22 107/8 110/6 112/14 113/3 117/14 117/22 119/22 120/1 122/20 132/18 133/5 133/19 139/7 140/5 143/12 143/12 143/25 148/20 149/8 151/4 158/12 162/4 164/21 166/2 169/18 171/15 172/13 172/24 172/25 173/22 173/23
so-called [2] 47/16 143/12
software [15] 19/14 19/19 19/24 30/13 30/16 33/21 42/3 42/13 46/10 49/9 63/3 109/7 110/8 110/10 112/15
solicitor [1] 115/13
solicitors [8] 97/18 101/19 105/2 112/25 120/2 141/14 144/18 172/20
solution [5] 7/8 30/18 30/19 38/13 54/22
solutions [1] 54/17
solve [1] 110/22
solves [1] 172/5
some [62] 12/11 16/5
16/6 16/9 17/22 18/22 24/24 25/4 27/4 36/16 43/3 50/20 50/22 63/23 64/24 64/25 65/14 69/4 70/23 78/7 80/24 84/12 87/16 88/12 90/14 91/16 91/25 93/2 93/2 96/24 97/14 108/3 108/8 109/1 110/12 112/2 114/16 118/11

118/25 119/19 123/21 123/24 124/5 124/23 129/15 133/10 134/7 134/24 135/9 138/11 138/12 138/14 139/22 141/18 147/2 155/9 156/6 160/21 163/2 168/9 169/15 169/22
someone [1] 50/13
something [9] 26/23
29/18 54/6 57/7 83/20
127/16 128/1 138/18 148/18
sometimes [3] 16/3 16/4 118/20
somewhat [1] 171/9
soon [2] 25/9 55/19
sorry [5] 23/12 23/12
57/1 124/24 171/25
sort [1] 131/5
sought [12] 19/15
57/17 57/21 68/14 92/2
105/17 126/14 143/8
150/4 153/12 167/2
169/12
sound [2] 137/17
140/10
sources [1] 120/21
spare [1] 171/10
speak [5] 13/3 26/3
40/9 52/13 96/22
speaking [1] 58/23
special [1] 92/8
specialist [2] 149/22
153/12
specific [9] 43/9 58/21
88/13 135/4 145/14 151/6 154/11 156/15 164/12
specifically [1] 158/6
specified [1] 38/24
speculate [1] 165/23
spend [1] 16/23
spent [2] 89/4 172/24
spike [1] 24/8
spite [1] $87 / 20$
SPMs [2] 14/14 26/18
spoke [1] 124/7
spot [6] 44/3 107/10
107/19 107/21 108/2
108/7
Square [3] 35/3 35/15

61/1
squarely [1] 157/20 SSC [30] 19/23 20/7 28/10 28/12 28/17
28/17 28/21 28/25 29/1 30/21 31/7 31/13 31/20 31/23 32/5 32/6 32/9
32/22 33/20 35/24 36/6
36/13 39/2 39/5 39/7
39/10 39/22 40/3 63/19
63/24
SSC's [1] 36/10
staff [9] 5/18 21/13
24/10 45/18 45/19
73/12 73/13 108/9
132/3
staffing [1] 23/22
stage [9] 3/25 4/18
23/7 78/24 81/25 91/4
93/16 105/14 167/16
stain [1] 149/3
stakeholder [1] 89/24
stakeholders [1] 129/1
stamps [1] 25/4
stand [3] 81/12 81/18
85/2
standard [5] 3/14
22/10 29/17 108/4
108/19
stands [1] 7/13
stark [1] 62/25
start [4] 49/24 75/15
166/22 170/21
started [6] 35/18 65/8
70/25 111/19 128/19
151/5
starting [6] 17/9 72/19
91/8 136/16 136/19 139/5
startling [1] 161/17
starts [1] 29/21
state [4] 40/3 56/16
59/17 135/19
stated [15] 52/8 53/11
53/21 75/5 78/9 104/8
127/20 129/24 131/25
146/20 148/15 155/13
158/1 168/21 169/20
stated' [1] 143/22
statement [10] 1/3
3/11 39/20 116/10
117/16 143/8 143/21

## S

statement... [3] 144/3 144/10 175/2
statements [4] 12/22 89/8 114/6 114/22
states [8] 10/13 24/18 24/21 29/25 30/10 34/15 63/2 162/22
stating [6] 40/6 56/15 65/25 109/10 122/17 165/20
status [2] 110/18 117/3
statutory [1] 100/2
stealing [1] 159/12
steering [1] 164/10
Stein [1] 171/7
stems [1] 165/24
step [1] 165/11
stepping [1] 86/7
steps [3] 43/11 52/16 102/14
stick [1] 173/18
still [9] 58/12 83/13
91/3 96/18 108/10
110/3 123/18 132/16 171/5
sting [1] 74/8
stock [23] 24/20 25/6 35/5 35/12 45/16 61/20
62/9 66/22 66/24 66/25
67/1 67/3 67/8 67/14
68/1 68/2 68/3 68/8
69/5 69/14 69/15
131/22 132/2
Stoddart [1] 50/16
stop [3] 5/5 56/10 169/7
store [2] 61/19 153/10
storing [1] 33/10
story [1] 102/23
strand [1] 144/21
strands [1] 90/24
strategies [2] 125/2 125/5
strategy [14] 49/12
69/2 70/7 136/7 161/1
162/3 162/7 162/14
162/18 163/6 163/10
165/2 169/25 170/10
stressed [1] 99/1
strong [6] 120/10

149/11 163/1 167/24 168/24 168/25
strongly [2] 148/14 166/7
structure [5] 16/18 49/7 61/10 61/14 61/22 structured [1] 141/11 Stuart [1] 1/19 stuck [1] 168/8 study [2] 43/25 48/3 subject [7] 72/25 76/15 78/19 134/1 140/21 146/9 164/23
submission [1] 138/19 submissions [2] 76/10 95/9
submit [2] 10/6 81/25
submitted [1] 106/17
subpostmaster [47] 12/6 19/3 35/4 35/10 56/3 56/12 62/21 64/21 65/4 66/18 67/3 67/13 67/17 67/24 68/4 68/7 68/11 69/21 72/21 73/2 74/15 75/20 76/8 78/1 78/10 78/23 79/5 79/12 81/5 81/25 82/14 83/18 91/13 93/19 96/8 107/25 108/15 108/20 110/19 132/17 147/13 149/5 150/6 151/15 155/15 155/20 170/20 subpostmaster's [4] 65/21 81/19 86/3 86/5 subpostmasters [121] 5/1 5/15 6/25 7/25 8/3 10/17 11/13 12/12 12/17 13/5 13/10 13/24 14/7 15/19 15/25 16/16 16/20 17/12 18/6 18/14 19/8 22/16 22/23 24/20 25/5 25/12 27/4 30/25 32/16 33/14 35/25 43/8 43/18 43/21 44/2 44/4 44/11 46/1 46/6 46/16 56/24 57/3 57/17 58/18 such [45] 7/1 10/16 62/24 63/16 65/1 68/17 $\quad 15 / 24$ 34/25 36/24 68/22 70/20 71/5 71/24 72/10 73/4 73/24 74/9 74/20 75/21 76/9 76/21 77/1 77/10 78/9 78/21 79/25 80/2 80/23 80/25

82/8 86/9 86/13 86/19 89/12 90/4 90/20 91/16 91/19 91/25 93/3 94/18 96/10 98/13 99/13 101/2 102/15 104/6 105/18 107/4 107/8 107/13 108/9 109/23 110/20 110/24 111/8 112/2 112/18 122/5 123/6 125/16 125/17 126/15 130/6 130/7 130/10 131/1 131/10 131/15 132/3 132/8 133/24 134/24 142/15 142/16 145/9 145/12 149/2 153/22 153/24 155/11 159/10 subpostmasters' [7] 23/1 27/21 43/14 58/2 93/10 94/24 124/4 subpostmistress [1] 55/18
subsequent [8] 45/10 49/14 117/23 118/12 118/18 121/10 139/17 142/3
subsequently [5] 7/17 44/11 166/10 167/17 169/10
subsidiary [1] 121/14 substance [3] 92/19 123/23 169/21
substantial [4] 59/5
93/11 98/1 168/15
substantially [1] 98/5
substantiate [2] 81/22 94/5
substantive [2] 92/20 163/14
subtext [1] 79/20
success [5] 10/19 57/5 166/11 169/2 169/15 successful [1] 57/8 successfully [2] 35/6 77/2

39/11 41/6 41/14 41/17 41/23 44/6 55/4 58/5
59/20 61/20 92/10
94/19 95/14 99/3
100/16 109/22 110/15

114/25 120/4 128/5 129/9 130/11 134/22 136/11 136/12 143/7 144/6 149/14 150/13 150/15 150/19 156/3 157/21 158/2 158/3 158/9 164/6 164/13 164/23 172/21
suffered [1] 99/15
sufficiency [4] 147/10 148/12 148/22 169/23 sufficient [12] 5/23 13/10 43/15 57/16 57/21 113/17 147/4 150/11 150/17 157/23 161/21 165/6
suggest [8] 8/13 25/11
59/10 81/1 141/9
151/10 159/12 164/23
suggested [1] 137/17
suggesting [1] 64/17
suggestion [3] 142/18
142/19 142/25
suggests [2] 11/8 107/3
suit [1] $81 / 24$
suitable [1] 46/25
suitably [3] 152/19 153/1 153/6
suite [1] 12/8
sum [2] 97/17 98/4 summarise [2] 16/5 22/3
summarised [8] 11/12
21/9 50/25 55/25 56/6
56/22 70/10 84/5
summarises [1] 63/23
summarising [1] 162/21
summary [10] 11/11
26/4 35/23 41/5 51/19 53/11 66/21 70/13 87/8 114/1
summer [1] 123/3
sums [7] 43/18 44/12 71/11 71/25 84/14 84/14 156/5
supplement [1] 7/12
supplemented [3]
5/16 5/17 5/18
supplied [3] 39/3 39/5
149/23
supply [1] 64/7
support [111] 5/18
7/13 11/18 11/21 12/1 12/2 15/1 15/5 15/6 15/23 16/5 16/14 16/16 16/18 16/21 16/24 17/1
17/12 17/16 17/18
17/22 17/24 18/2 18/3
18/8 18/15 18/18 18/21
19/4 19/8 19/9 19/13 19/14 19/17 19/20 19/22 19/25 20/1 20/5
20/9 20/12 20/18 20/22
20/24 21/7 21/20 21/24
22/20 23/5 24/3 25/14
25/20 25/24 26/25 27/2
27/5 27/6 27/8 27/18
27/20 27/22 27/23 28/1
28/18 31/6 31/7 31/9
$31 / 1031 / 1531 / 16$
$31 / 2032 / 832 / 1033 / 19$
34/5 34/19 37/17 37/18
37/20 37/24 38/9 38/10
38/12 38/25 40/15
40/16 41/25 42/6 53/19
53/20 55/11 56/23 57/2
60/10 64/25 69/1 76/5
76/6 78/13 105/10
106/6 112/17 114/6
123/7 135/12 145/12
145/25 153/22 153/25
154/17 157/23
supported [2] 44/13
141/13
supporting [2] 85/2 134/7
supportive [1] 159/17
supposed [6] 16/2
27/17 28/5 50/8 76/6 81/25
suppressors [1] 65/12
Supreme [1] 167/3
surfaced [1] 82/19
surpluses [1] 123/14 surprise [1] 155/17
surprising [1] 58/8
Susan [1] 122/1
suspected [3] 63/25
64/3 109/21
suspended [5] 49/25
76/13 76/15 76/17
108/20

## S

suspense [26] 43/17
43/22 45/20 45/24 61/5 66/19 66/20 66/22 67/11 67/16 68/18 68/20 68/23 69/6 69/7 69/10 69/13 69/18 69/25 71/18 109/4 111/10 114/21 127/4 156/2 156/12
suspension [1] 87/22 suspensions [1] 88/2 swallowed [1] 98/2 swap [2] 64/5 64/7 swift [33] 102/11 102/12 102/17 145/1 145/4 145/6 145/18 146/1 146/7 146/13 146/15 146/20 147/3 147/5 147/10 147/23 148/8 148/14 149/19 150/20 151/16 152/17 153/23 154/23 155/8 155/23 156/9 156/17 157/2 157/8 157/13 161/22 162/25
symptoms [3] 29/25 30/5 41/13
syncing [1] 130/24
system [104] 3/20
4/16 4/21 5/3 10/5 10/7 13/18 13/25 14/10 15/4 19/10 19/15 19/18 19/23 20/5 20/24 21/13 21/24 22/7 22/14 25/16 25/18 25/19 27/24 29/3 30/23 31/3 31/7 32/24 33/1 33/1 33/4 33/8 33/13 33/15 33/17 35/4 36/13 36/15 36/20 37/18 38/1 41/11 41/17 41/22 47/20 47/21 49/5 49/7 50/17 50/22 54/18 56/17 57/8 57/25 58/7 58/14 59/1 61/18 62/11 64/12 67/15 67/23
72/25 73/20 74/18 78/25 79/9 88/13 93/7 93/25 95/15 104/4 104/15 104/23 106/6 106/19 107/5 108/13 110/7 112/14 113/23

122/5 123/9 124/22 125/20 134/6 134/9 134/11 135/25 136/3 140/1 145/11 145/20 146/3 150/21 150/22 152/1 152/22 153/3 153/4 153/11 157/5 158/16
System' [1] 134/3 system's [1] 135/1 system-wide [2] 110/7 112/14
systematically [1] 133/11
systemic [14] 101/14
106/5 110/7 112/15 124/22 125/18 135/7 135/14 135/24 136/2 136/12 140/11 145/19 157/4
systemically [1]
135/10
systems [11] 28/19
32/22 38/1 38/25 42/6
53/3 103/11 121/14
122/11 122/14 130/15

## T

table [4] 25/25 26/2
88/5 88/7
tactic [1] 79/3
tagged [1] 53/25
Tahir [1] 12/13
tail [1] 74/8
tainted [1] 140/16 take [4] 27/14 43/7 86/11 171/2
taken [33] $3 / 35 / 69 / 24$
12/5 12/7 15/14 31/5 38/12 43/11 52/16 56/9 67/24 73/23 78/8 88/21 89/12 90/18 101/1 102/14 118/8 119/1 120/4 121/10 122/2 131/17 133/13 137/15 145/8 148/5 151/1 151/4 152/16 153/21
takes [1] 23/23
taking [5] 14/3 43/10
52/12 117/25 160/4
talking [3] 134/23
171/3 173/19
tamper [1] 53/22 tangible [1] 108/5 target [1] 45/3 targets [1] 24/1 task [2] 57/14 155/19 tasked [4] 25/21 40/16 81/4 162/2
tasks [1] 7/1
team [22] 13/1 17/19 17/20 19/25 20/2 30/20 48/21 50/12 76/6 79/14 79/16 80/16 81/16 83/7 84/3 129/16 141/12 161/24 163/3 165/14 166/5 173/15
team's [2] 77/19 172/24
teams [9] 19/22 20/6 20/9 37/2 39/8 60/8 83/1 121/20 121/22
technical [18] 15/5 15/11 17/1 17/3 19/3 19/16 21/5 21/9 27/21
29/2 31/21 31/24 31/25
57/16 61/9 89/24 108/3
160/15
technically [1] 119/18
technology [1] 173/6
telecommunications
[1] $135 / 1$
telephone [5] 12/4
18/2 18/12 21/18 76/5
tell [2] 70/22 71/1
Temple [1] 141/25
temporal [1] 137/20
ten [8] $4 / 84 / 104 / 24$
11/20 11/21 11/25 47/2
47/4
ten days [3] 11/20
11/21 11/25
ten minutes [2] 47/2
47/4
term [1] 77/4
terminals [2] 47/20

## 131/24

terminate [1] 86/2
terminated [2] 126/2 142/11
termination [1] 164/18
terms [13] 3/6 62/25
70/23 93/2 95/9 97/6
97/9 97/10 97/14

114/25 120/10 127/13 153/22
terribly [1] 83/20
test [11] 10/3 10/6
10/17 10/21 10/24
92/10 113/9 115/10
117/9 127/8 166/15
tested [2] 8/13 10/19
testing [1] 10/1
text [1] 30/4
than [25] 9/13 24/17
37/21 38/11 39/22
41/14 48/12 49/1 56/20
56/24 57/4 64/22 66/24
79/11 92/18 98/5
102/24 108/5 141/11
143/5 151/6 154/17
171/22 172/3 173/15
thank [36] 1/7 1/12
2/15 5/8 7/4 9/24 18/25
21/12 23/14 25/15 26/1
27/1 31/5 31/8 32/21
33/25 35/9 37/8 42/1
47/6 54/11 55/9 63/22
71/3 84/19 88/10 99/21
99/25 113/25 133/20
134/21 136/25 171/21
171/23 173/23 174/1
that [829]
that I [6] 10/1 18/19
90/16 91/21 101/6
170/18
that's [56] 1/9 5/9 6/20
11/14 16/18 22/8 24/3
24/16 26/23 29/6 39/20
40/6 46/25 47/3 49/18
50/8 50/18 52/21 63/22
64/1 65/11 73/12 74/24
77/18 83/25 84/19 89/1
96/12 96/17 98/22
103/18 105/18 108/17
114/20 115/7 115/11
121/18 126/9 126/18
132/18 136/4 137/8
140/9 141/5 142/8
146/6 149/23 150/25
164/18 166/9 167/11
167/19 168/1 170/14
170/15 172/18
thecounsel [1] 172/10
theft [27] 53/15 56/14
74/1 102/10 142/8

142/15 142/20 143/1 143/6 143/17 144/5 144/10 147/12 147/14 147/15 147/18 147/21 148/1 150/6 150/10 150/12 150/18 157/22 158/11 159/6 159/10 159/17
their [59] 2/18 15/11 16/16 17/16 26/17 42/12 44/6 66/10 71/11 73/11 76/10 81/20
81/22 82/17 85/3 85/24
90/17 90/20 91/14
102/20 103/2 103/4
108/9 108/24 109/9
109/24 112/18 114/19
116/20 117/2 120/3
123/16 124/6 124/13
124/14 125/1 126/2
126/21 127/13 128/17
130/3 132/3 132/12
132/14 133/24 138/3
138/7 138/11 141/3
141/14 142/11 144/18
145/9 146/11 148/22
153/5 154/13 170/21 171/8
them [45] 1/15 10/9
17/12 17/22 34/9 34/17
34/20 36/1 40/12 43/23
50/6 51/22 55/15 55/16
61/1 64/6 64/23 72/14
74/10 81/5 82/24 94/17
103/7 109/25 110/1
113/6 120/14 124/5
125/5 128/11 130/7
133/25 135/4 144/8
152/6 153/14 155/3
156/23 169/22 170/19
173/2 173/6 173/8
173/9 173/9
theme [1] 60/4
themes [5] 13/7 15/8
111/21 111/23 131/13
themselves [10] 9/3
12/25 26/4 27/19 31/1
34/16 57/16 57/18
163/7 172/17
then [48] 6/14 8/9 8/24
10/9 10/25 12/8 31/18
32/2 34/12 35/25 39/25

| $\mathbf{T}$ |
| :--- |
| then... [37] 48/10 |

57/19 69/15 73/1 75/9 75/13 75/15 76/12 78/2 83/1 83/16 93/22 95/17 98/10 102/13 102/21 105/4 107/19 111/15 112/18 114/14 117/4 119/8 119/14 119/18 123/16 125/12 144/23 145/1 149/19 151/11 160/14 164/2 164/4 168/6 168/11 168/19
there [112] $5 / 228 / 23$
8/24 11/15 11/19 11/24 14/1 19/20 22/2 23/10 24/23 25/25 26/8 28/7 29/4 29/20 30/11 30/13 30/18 34/25 38/14 42/13 46/18 46/20 50/6 50/23 51/14 51/21 52/15 53/8 55/3 56/16 57/24 61/11 62/14 63/25 64/3 67/6 68/10 71/16 74/17 81/1 83/2 83/11 84/23 87/16 87/18 88/16 92/4 94/11 95/4 95/9 95/13 95/18 100/4 100/8 101/8 106/4 108/10 110/3 112/11 112/23 113/6 113/7 115/1 116/23 117/6 $117 / 7117 / 7$ 118/4 119/24 121/5 122/17 122/20 122/25 125/18 127/9 127/15 128/20 129/6 130/2 132/24 134/24 135/7 135/24 136/2 138/5 141/16 142/15 146/3 147/5 147/17 150/10 150/17 155/6 156/4 157/4 157/22 158/2 158/3 159/6 159/11 160/4 160/21 161/23 166/17 167/12 168/5 168/19 168/24 169/2 169/14
there's [3] 75/4 159/23 171/14
thereafter [2] 2/2 125/8
thereby [2] 116/19
140/21
therefore [17] 9/15 10/18 14/1 32/16 60/2 62/16 69/8 119/16 136/8 151/13 154/7 163/5 168/15 170/18 170/20 172/19 173/7 thereof [1] 156/13 these [69] 4/23 9/23 11/10 12/24 15/6 16/3 17/12 17/15 18/11 18/20 20/6 20/12 20/13 20/20 23/2 24/11 28/8 28/15 33/17 36/10 40/9 41/13 42/20 47/17 48/23 49/19 52/12 55/17 56/19 58/16 59/11 59/12 60/25 66/14 68/14 68/17 70/17 73/3 73/24 74/2 83/5 84/11 85/4 87/16 87/19 87/22 88/18 90/13 90/25 92/2 92/6 92/18 93/10 96/24
102/24 111/23 112/13 120/12 128/19 129/15 130/22 131/12 131/16 131/17 148/9 152/17 155/17 158/24 170/11 they [111] 4/10 7/22 7/23 8/4 8/24 10/5 11/15 12/14 14/5 14/16 15/8 18/12 25/7 27/9 34/10 44/5 48/9 48/9 52/12 59/3 59/4 64/18 66/3 67/4 67/19 67/25 70/17 71/12 71/13 76/10 77/5 77/10 77/11 78/5 78/11 78/12 79/25 this [317] 80/4 81/3 81/6 81/6 Thomas [3] 51/1 51/17 81/18 83/5 84/13 84/14 51/24
85/2 86/6 86/19 86/22 Thompson [1] 125/16 86/23 87/3 88/23 93/1 Thomson's [1] 102/25 95/24 96/1 97/25 98/6 99/15 108/11 109/22 109/23 110/9 111/9 112/3 112/14 117/14 118/6 118/7 118/9 121/9 123/25 124/10 125/24 126/18 126/20 126/21 127/8 127/11

128/10 130/6 130/21 131/2 132/14 137/23 138/7 138/15 139/13 142/21 147/17 148/15 149/7 149/17 152/2 154/10 155/13 155/17 156/21 156/24 157/17 159/12 161/12 164/4 169/23 169/24 172/3 172/9 172/10 172/14 172/17 173/1 173/8 they'd [1] 124/19 they're [4] 34/13 124/10 128/14 134/23 they've [1] 171/18 things [11] 10/21 44/5 49/24 67/19 67/25 85/2 102/1 122/10 125/17 141/24 158/21 think [11] 1/5 6/20 24/17 34/16 37/7 85/20 148/23 171/18 172/15 172/18 173/13
thinking [1] 172/24
third [31] 8/9 19/17
19/22 20/4 28/18 31/6 31/16 33/21 34/5 37/17 37/24 38/10 40/14 40/14 42/2 51/9 56/11 72/13 79/19 79/22
92/20 94/2 110/14
118/25 127/3 127/5
143/23 145/11 153/6 155/14 156/2
third-party [3] 33/21
127/5 155/14
thirdly [8] 11/23 66/15 95/8 98/15 101/17 109/6 130/13 159/11 thoroughness [1] 109/14
those [58] 2/17 3/2 13/17 14/13 16/12 19/12 26/8 34/7 43/10 43/12 44/5 50/24 52/11 59/21 60/22 65/9 69/7 70/9 74/11 81/4 86/13

89/5 89/8 91/7 92/8
92/25 100/23 103/6
104/24 109/15 113/4
116/8 117/1 117/9 118/10 118/15 $119 / 8$ 120/13 123/24 125/4 129/23 133/10 133/14 135/4 138/12 139/12 145/24 149/16 150/14 152/24 155/1 155/6 156/14 157/19 161/20 165/5 169/18 171/9
though [4] 87/24 87/25 96/10 138/21
thought [3] 6/11 85/19 173/17
thousands [1] 53/13 thread [1] 74/4 three [13] 2/13 12/7 21/12 29/12 30/4 55/16 64/1 67/25 81/9 100/19 100/24 126/22 137/22 three months [1] $12 / 7$ three paragraphs [1] 2/13
three years [1] 137/22 through [14] 7/17 16/12 34/7 60/12 69/21 74/5 82/18 124/16 133/4 141/12 145/12 152/10 153/25 169/5
throughout [10] 17/21 18/23 29/7 59/6 59/13 60/4 60/9 152/14 153/2 153/10
Thursday [1] 25/3
thus [1] $51 / 5$
ticket [3] 28/6 33/11 65/6
tickets [3] 26/12 32/23 66/6
tiers [1] 17/21
Tim [4] 102/14 144/23 152/13 162/23
time [34] 3/6 4/5 5/23
5/24 13/10 20/14 21/19
31/11 31/22 48/6 51/12
52/25 55/3 59/4 59/5
70/5 89/4 94/1 107/9
110/12 129/3 131/18
133/18 136/18 137/3
144/23 150/17 150/24

152/16 155/12 155/15
170/4 171/6 171/19
timeline [1] 16/7
timeliness [2] 78/6 79/19
timely [2] 108/13
110/17
times [1] 77/5
timescales [1] 173/19
timetable [1] 171/13
to [1433]
today [10] 16/11 52/4
65/11 90/13 90/17
101/7 124/1 125/7
170/19 172/14
together [9] 4/23 18/8
49/15 86/13 92/3 92/8
92/14 111/22 145/3
told [6] 52/1 114/18
125/10 127/11 150/22
171/8
tomorrow [3] 170/21
173/23 173/25
too [4] 10/24 78/20
147/7 147/11
took [6] 11/1 87/3 94/7
110/12 133/5 152/14
top [7] 23/9 29/13
29/20 31/13 84/4 139/5
151/7
top-down [1] 151/7
topic [1] 17/4
total [6] 6/9 6/10 23/23
30/8 92/17 155/7
totality [2] 58/23 135/8
totalPayments [2]
30/4 30/6
totalReceipts [3] 30/3
30/6 30/7
touch [4] 10/1 72/15
91/3 162/15
touched [5] 96/25
101/10 131/20 138/25 158/15
towards [7] 57/7 73/4
90/20 90/21 90/21
90/22 161/2
TPS [1] 40/21
traced [1] 102/24
track [2] 87/2 107/15
trade [2] 26/9 44/9
trading [21] 11/18

## T

trading... [20] 43/19 43/23 44/5 44/8 45/11 45/14 46/23 66/23 67/14 68/24 69/8 69/14 69/16 69/23 70/1 72/13 74/11 74/15 79/7 111/7 traditional [1] 28/1 trail [2] 131/9 134/16 train [2] 6/25 11/9 trained [3] 3/14 17/24 134/23
trainee [1] 10/7 trainees [6] 3/9 3/14 8/16 10/4 10/14 10/19 trainers [1] 12/25 training [96] $1 / 131 / 15$ 1/17 1/25 2/2 2/4 2/6 2/9 2/17 2/19 2/24 3/4 $3 / 53 / 83 / 103 / 163 / 21$ 3/24 4/1 4/3 4/5 4/7 4/8 4/9 4/24 5/4 5/11 5/13 5/14 5/19 5/21 6/1 6/4 6/16 6/18 7/8 7/12 7/21 7/24 8/4 8/8 8/10 8/12 8/13 8/17 8/20 8/22 8/25 9/5 9/12 9/14 9/20 9/23 9/25 10/15 10/22 10/25 11/2 11/4 11/7 11/8 11/10 11/12 11/17 11/20 11/22 11/25 12/1 12/8 12/14 12/16 12/18 12/24 13/4 13/8 13/9 13/11 13/15 13/17 13/20 13/21 13/23 14/2 14/4 14/13 33/8 48/25 53/20 60/10 106/6 123/7 130/25 145/12 145/25 153/24 154/17 transaction [69] 4/14 41/1 45/12 47/24 48/10 48/16 49/2 51/2 55/22
56/1 64/16 64/18 64/20
64/22 64/22 66/9 71/9
71/23 72/13 72/25
75/25 77/3 77/4 77/13
77/14 77/16 77/23 78/5 78/6 78/8 78/14 78/19 78/22 79/22 80/6 80/12 80/20 81/6 81/9 81/11 81/12 81/15 81/17 82/6 82/11 83/16 83/24 84/6

84/9 84/11 86/10 $96 / 4$ 96/6 96/7 96/9 103/20 103/22 110/16 110/18 111/10 111/11 122/14 127/21 128/3 132/7 151/12 151/22 152/20 156/7
transactional [3] 127/3 132/2 134/16 transactions [33] 17/14 48/15 48/20 51/6 51/10 51/20 58/2 58/4 61/4 63/11 63/12 63/17 64/1 64/4 65/5 65/19 65/22 66/1 66/8 66/12 77/9 84/13 94/25 95/2 110/12 121/21 123/13 127/5 128/8 130/23 131/21 153/2 153/15 transcript [1] 4/19 transcription [1] $1 / 10$ transfer [6] 35/5 35/6 35/11 35/11 95/20 130/9
transferred [2] 67/4 75/12 transparency [1]
76/23
transparent [1] 83/10
Treasury [3] 137/7
141/23 145/3
treat [2] 93/6 155/1
treated [2] 75/19 86/19 treatment [3] 123/14 145/9 155/3
tree [10] 61/3 61/6 61/9 61/14 61/15 61/21 61/24 61/25 63/3 63/8 trees [2] 62/10 63/4 trenchant [2] 119/23 149/14
triage [1] 29/1 trial [19] 65/4 68/1 68/4 74/12 93/13 95/3 100/11 100/11 100/17 160/10 160/10 160/16 163/22 165/16 165/18 166/22 167/1 169/6 169/10
trials [2] 114/10 168/7 tried [5] 25/7 35/5 66/19 67/13 69/23

| trivial [1] 28/15 |
| :--- |
| Trotter [3] 85/12 85/15 |

U
UKGI [2] 171/14 172/4 ultimately [2] 81/18 83/8
unable [4] 30/25 44/5 50/21 128/10
unaudited [1] 37/25 unauthorised [1] 127/21
unbelievable [1] 169/3 unclear [3] 53/6 118/13 119/2 uncontroversial [2] 3/7 3/11
uncorrected [1] 156/7 under [38] 6/6 12/22 14/10 21/10 22/17 23/14 23/25 29/24 30/5 30/9 30/17 30/19 31/13 37/17 38/22 39/20 41/4 44/23 51/10 62/8 73/8 73/11 74/14 75/22 84/18 91/17 92/3 98/17 98/19 107/3 115/10 115/13 123/18 128/17 135/19 140/13 $152 / 7$ 173/10
Under-Secretary [1] 135/19
undergo [1] 37/20
underlying [3] 104/25
110/23 160/18
undermine [3] 58/3
94/25 150/7
undermined [3] 116/5 144/3 150/13
undermines [1] 116/1 underneath [1] 54/11 understand [3] 34/4 75/3 119/1 understandable [1] 78/16
understood [1] 146/2
undertake [2] 44/3
96/1
undertaken [2] 88/8 146/8
undertaking [1]
148/22
undiscovered [1] 59/4
unequivocal [1] 144/9
unfair [2] 139/21 166/6
unhelpful [2] 110/22 154/1 unintentionally [1] 64/19
unit [18] 20/1 21/20
35/5 35/6 35/7 35/12
40/16 62/9 66/22 66/24
66/25 67/14 68/1 68/2
68/3 68/8 69/14 69/15
units [5] 61/10 67/1
67/3 67/8 69/5
unjustifiably [2] 65/7
149/3
unless [4] 44/5 75/9
75/17 164/24
unlikely [3] 159/6
170/17 170/19
unmatched [3] 156/1
156/5 156/11
unmuted [1] $1 / 5$
unnecessarily [1] $27 / 7$
unnecessary [1]
143/13
unprecedented [1]
166/7
unprofitable [1]
143/13
unquestionably [1]
158/5
unreconciled [1]
$128 / 7$
unresolved [2] 69/5
111/9
unrestricted [2] 37/25
128/23
unsafe [3] 117/13
127/10 127/16
unsuccessful [3]
35/12 93/13 167/1
unsuitable [1] 134/22
unsurprisingly [2]
28/5 28/9
unsympathetic [1]
110/22
untenable [1] 140/17
until [7] 61/17 117/20
133/3 139/22 152/10
152/10 174/3
unusual [2] 110/14
151/7
unusually [2] 169/18 173/14

| U | 66/3 110/23 134/10 | 172/15 173/6 | 25/23 25/25 28/3 29/10 | well [20] |
| :---: | :---: | :---: | :---: | :---: |
| up [48] 2/10 4/6 5/2 | user's [1] | viewed [2] 80/7 160/11 | 30/9 31/7 31/11 31/18 | 12/25 15/4 49/24 59/12 |
|  | users [6] 6/18 39/22 | viewing [1] 170/21 | $32 / 232 / 333 / 2333 / 23$ | 113/6 117/14 120/6 |
| $12 / 4 \text { 14/3 17/25 18/24 }$ | 40/3 64/9 134/12 | views [3] $2 / 558 / 17$ | 34/4 34/18 34/19 35/13 | 123/8 128/25 141/11 |
| 27/7 | 150/25 | 159/4 | 36/12 37/6 37/6 39/6 | 141/14 149/9 154/15 |
| 29/11 36/12 37/6 42/14 | uses [1] 91/8 | visit [1] 12/6 | 40/7 40/7 40/9 40/21 | 160/14 164/10 172/5 |
| 48/23 50/10 54/16 56/1 | using [10] 10/8 13/18 | visited [1] 84/20 | 41/2 42/14 42/19 46/11 | 173/12 |
| 62/3 63/20 65/2 84/8 | 17/12 33/17 61/15 | vital [1] 28/17 | 47/4 48/5 49/14 53/3 | went [11] $2 / 24$ 24/2 |
| 84/12 85/3 85/7 91/21 | 64/12 83/15 104/20 | voice [1] 24/5 | 53/12 53/14 53/15 54/9 | 50/24 51/7 56/16 75/1 |
| 98/2 103/18 113/24 | 136/20 139/12 | voiced [2] 79/21 79/22 | 54/9 54/17 59/10 60/2 | 76/9 78/4 138/9 155/16 |
|  | usual [1] 145/23 | volume [6] 14/1 24/5 | 60/7 60/11 61/23 62/3 | 158/7 |
| 128/13 133/3 133/17 | usually [2] 77/25 | 47/23 48/16 49/1 49/25 | 62/6 63/20 63/21 73/6 | were [201] |
| 14 | 165/12 | vulnerable [1] 86/6 | 73/7 75/2 75/15 80/21 | what [82] 3/1 3/17 9/22 |
| 9/24 168/7 172/25 | V | W | 82/2 83/21 84/12 84 | 12/16 13/4 13/12 14/13 |
| 173/8 |  |  | 84/19 84/22 85/8 85/12 | 22/12 25/2 35/21 42/11 |
|  | v Post Office [1] | wait [1] 25/12 | 86/1 87/6 88/5 88/10 | 48/4 49/11 49/15 49/17 |
|  | validity [1] $72 / 7$ | waiting [2] 24/25 52 | 88/10 88/11 89/8 91/9 | 52/13 53/7 55/3 58/15 |
|  | value [2] 54/20 54/24 | want [8] 5/22 15/23 | 91/15 97/2 99/19 | 58/20 58/22 60/8 60/21 |
|  | values [1] 55/4 | 34/20 46/20 139/3 | 103/18 104/2 104/1 | 63/8 66/13 68/16 70/8 |
| update [4] 37/23 98/23 | varied [1] 70/14 | 170/3 172/17 173/12 | 109/12 113/24 115/3 | 70/16 71/7 71/11 72/11 |
|  | various [20] 2/12 4/16 | wanted [6] 34/7 67/16 | 116/11 117/8 118/17 | 72/13 72/19 73/18 |
| updated [1] 126/7 updates [1] 17/13 | 11/25 17/13 37/1 58/21 | 71/1 127/17 128/2 | 118/18 118/22 122/22 | 74/23 75/1 75/4 80/15 |
| updates [1] 17/13 | 59/18 59/24 60/6 60/8 | 171/16 | 125/18 127/14 127/25 | 85/11 85/16 85/18 86/1 |
|  | 61/22 90/24 91/6 98/9 | wants [1] 172/16 | 128/13 128/15 128/19 | 87/2 91/1 91/7 94/1 |
| [13] 31/1 32/6 | 102/5 102/16 102/21 | Ward [1] 115/19 | 128/20 129/13 129/18 | 104/9 104/18 107/10 |
| 91/9 94/15 96/2 | 129/6 129/10 164/3 | Warmington [1] | 129/20 132/23 133/17 | 108/6 112/16 113/15 |
| 5/1 | vast [3] 91/25 107/4 | 10 | 133/22 134/18 134/20 | 115/5 118/14 119/3 |
| 121/1 152/3 162/6 | 133/23 | warning | 135/9 136/18 139/1 | 121/3 121/9 121/10 |
|  | Vennells [2] 111/16 | warrants [1] 85/20 | 139/19 140/18 141/21 | 122/22 123/3 124/3 |
| upper [1] $27 / 22$ | 12 | was [567] | 146/17 147/2 14 |  |
| uprating [1] 25/4 |  | wasn't [6] 127/20 |  | 124/18 126/4 130/13 |
| us [7] 17/10 104/19 |  | wasn't [6] $127 / 20$ | 148/16 148/23 152/2 | 130/21 136/5 136/18 |
| 128/22 129/11 129/14 | verbatim [1] 119/14 |  | 164/23 165/23 166/7 | 0/5 142/1 144/9 |
| 151/20 172/11 |  | 17012 | 171/5 171/7 171/10 | 144/16 150/21 152/15 |
| use [23] 3/19 4/218/ | 126/8 | way [28] 9/8 34/3 | 171/21 172/13 172/1 | 153/20 155/16 156/16 |
| 10/5 10/7 19/6 36/10 | versions [2] 16/10 | 67 | 172/18 172/24 173/7 | 156/24 165/3 168/4 |
| 36/20 37/4 40/7 50/2 | 134/8 | 69/12 74/22 78/17 | 173/18 173/20 | 172/2 173/13 173/22 |
| 61/15 63/4 77/14 82/2 | very [25] 1/7 12/14 | 95/11 97/20 98/5 | we'll [4] 40/5 55/5 | what's |
| 95/16 113/19 113/21 | 14/12 18/19 | 106 | 141/20 149/15 | when [60] $6 / 108 / 7$ |
| 153/2 153/5 153/8 | 29/19 44/16 46/3 47/6 | 114/25 120/11 140/25 | we're [2] 52/11 88/6 | 21/24 25/6 30/11 30/23 |
| 155/18 158/16 | 47/13 64/20 91/3 98/1 | 141/1 141/22 142/2 | We've [2] 52/3 85/15 | 34/19 35/4 36/8 36/15 |
| -5518 | 99/21 124/10 131/15 | 152/10 157/21 164/1 | weakness [1] 160/12 | 40/6 42/17 43/18 43/20 |
| 27/20 32/22 33/4 36/14 | 136/25 155/21 163/1 | 165/24 170/13 172/8 | Wednesday [5] 1/1 | 44/7 47/3 51/17 51/24 |
|  | 168/10 170/24 171/21 | 173/9 | 23/15 24/8 24/14 119/2 | 52/14 54/17 58/15 |
| $\begin{aligned} & 39 / 840 / 842 / 20 \\ & 458 / 1079 / 281 / 2 \end{aligned}$ | 171/23 173/11 173/23 | ways [5] 23/24 37/1 | Wednesdays [1] 23/17 | 59/25 60/22 61/15 |
|  | vested [1] 37/21 | 70/14 133/13 144/6 | week [7] 6/13 23/20 | 62/17 63/8 66/13 68/14 |
|  | vetting [1] 37/20 | we [154] 1/4 2/2 2/10 | 23/23 24/9 24/21 54/15 | 69/8 69/15 69/21 70/9 |
| useful [1] 16/12 | via [1] $76 / 3$ | 2/13 2/25 4/5 4/11 6/5 | 171/17 | 73/18 74/20 75/4 76/20 |
| user [25] 4/14 4/15 | viability [1] 85/5 | 6/6 6/14 7/3 7/19 7/22 | weekly [5] 23/17 24/1 | 25 |
| 4/20 4/22 4/24 | view [13] 7/8 65/7 | 9/6 10/5 13/2 17 | 42/9 102/25 119/19 | 95/15 104/20 |
| 5/12 5/14 5/19 | 124/13 143/10 148/16 | 19/4 20/19 21/3 21/11 | weeks [3] 5/12 35/1 | $110 / 20113 / 7126 /$ |
| 31/2 33/2 38/15 48/24 | 149/23 158/19 168/5 | 21/25 22/5 23/11 23/13 |  | $1 / 22$ |
| 54/1 63/18 64/9 64/14 | 168/19 168/21 168/25 | 24/11 24/25 25/2 25/8 | weighed [1] 8/6 | 35/8 141/15 141 |


| W | 165/1 165/5 166/16 | 146/22 151/10 151/23 | 57/19 59/22 60/2 60/20 | 128/10 129/14 132/2 |
| :---: | :---: | :---: | :---: | :---: |
| when... [9] 142/15 | /8170/12 | 162/18 163/7 | 61/23 62/2 66/24 68/6 | 132/8 132/17 |
| /23 148/22 149/7 | which [183] | Wilkerson [1] 52/8 | 68/8 68/20 69/25 70/4 | 155/21 158/12 168/8 |
| 150/20 157 | while [4] 23/22 79/20 | will [285] | 70/16 74/17 76/7 77/12 | witness [14] 12/22 |
| 158/21 165/23 | 84/6 131/7 | willing [1] 165/22 | 78/4 80/17 81/4 81/6 | 89/8 101/21 104/5 |
| where [59] 26/8 | whilst [11] $8 / 535 / 11$ | Windows [1] 68/15 | 82/1 83/3 83/5 83/6 | 113/20 115/11 116/3 |
| 28/3 28/6 28/1 | 42/16 46/22 65/19 | Winn [7] 74/23 74/25 | 83/11 83/23 86/13 | 116/5 116/9 117/16 |
| 37/23 40/19 42/1 43/22 | 65/21 96/24 104/15 | 75/23 77/10 81/23 | 92/14 94/15 94/16 | 140/16 140/21 172/12 |
| 46/18 47/14 4 | 107/1 134/15 169/7 | 81/24 82/2 | 100/2 101/5 101/14 | 172/22 |
| 52/15 53/13 62/25 66/3 | whistleblowing [1] | Winn's [1] 8 | 103/1 105/17 106/5 | witnessed [2] 65/18 |
| 66/18 67/13 67/25 | 89/25 | wise [1] 138/10 | 106/20 107/5 107/19 | 65 |
| 71/17 78/12 80/19 81/5 | Whitham [1] 8 | wish [86] 2/5 7/19 | 107/20 107/21 109/14 | witnesses [7] 13/2 |
| 82/16 82/18 83/19 | who [59] $7 / 13$ 12/13 | 9/20 10/1 10/18 13/22 | 109/23 109/24 110/7 | 36/1 40/9 80/22 90/3 |
| 88/11 92/4 100/4 | 13/24 14/15 36/1 40/11 | 15/22 17/14 17/23 18/4 | 111/1 111/3 111/9 | 172/11 173/1 |
|  | 50/4 52/8 55/2 57/14 | 18/7 18/11 18/22 22/11 | 111/12 111/22 112/15 | Womble [4] 162/8 |
| 110/17 113/6 113/9 | 58/15 60/21 63/7 63/13 | 22/20 23/3 23/4 25/13 | 112/23 113/5 114/7 | 162/20 164/1 164/14 |
| 116/9 117/7 117/7 | 66/13 67/3 70/8 71/10 | 26/13 26/23 27/19 | 114/8 115/8 115/22 | won't [1] 85/8 |
|  | 72/6 79/18 81/8 81/14 | 28/16 29/6 31/3 32/16 | 118/15 120/16 121/10 | wonder [3] 113/24 |
| 132/6 132/19 133/10 | 81/24 84/20 85/13 90/8 | 33/19 34/23 35/21 | 123/5 124/20 124/22 | 133/16 139/1 |
| 134/22 144/10 145/14 | 91/13 91/17 91/18 | 35/23 36/3 36/21 37/13 | 126/14 128/5 128/21 | word [3] 29/14 115/11 |
|  | 91/22 97/19 98/18 | 38/21 39/7 40/10 41/21 | 128/23 130/8 130/10 | 119/9 |
| 150/10 154/14 155/6 | 101/2 103/4 103/20 | 41/22 42/5 43/9 43/13 | 130/16 130/23 130/25 | words [6] 3/15 26/3 |
| 155/20 156/4 157/9 | 103/22 105/2 113/4 | 46/8 46/15 48/18 49/21 | 131/1 131/2 133/25 | 47/25 75/17 124/23 |
| 65/1 | 115/14 118/10 120/13 | 55/6 57/5 57/13 57/20 | 134/13 134/24 134/2 | 155/18 |
| ther [102] 3/5 | 121/8 124/3 124/7 | 58/12 58/14 58/19 | 136/16 138/3 138 | work [25] 2/21 4/25 |
| 7/20 7/237/24 8/23 | 124/19 125/4 131/15 | 58/22 59/10 59/18 | 138/8 139/2 140/4 | 5/20 11/4 15/11 17/19 |
| 9/18 10/4 $10 / 711 / 2$ | 134/22 154/13 155/1 | 60/21 62/23 63/7 66/11 | 140/15 142/4 142/15 | 23/17 23/18 28/14 2 |
| 15/22 17/8 18/12 22/21 | 156/22 157/8 159/3 | 68/15 70/5 70/8 70/15 | 145/3 145/23 147/6 | 32/14 52/5 108/10 |
| $2231 / 233 / 113$ | 160/14 161/20 161/22 | 72/1 76/23 77/11 81/1 | 147/12 148/6 148/10 | 110/3 111/18 125/11 |
| 42/12 43/11 46/20 | 161/24 168/12 171/4 | 81/2 82/5 86/8 86/11 | 149/24 150/6 153/14 | 128/19 138/11 146/23 |
| 8/24 49/19 | whole [3] 37/14 62/13 | 86/24 88/22 89/1 103/6 | 154/4 154/12 154/16 | 152/4 154/19 154/21 |
| 49/22 49/23 50/2 51/16 | 163/9 | 119/19 137/18 162/4 | 155/15 156/13 156/21 | 155/8 155/22 173/18 |
| 51/24 52/15 52/18 57/5 | wholly [1] 120/4 | 162/17 163/9 164/19 | 156/23 157/4 158/5 | workaround [3] 25/8 |
| 57/9 57/13 57/21 62/23 | whom [4] 76/19 91/25 | 165/5 170/15 171/4 | 159/2 159/16 159/21 | 28/7 28/9 |
| 70/22 71/12 71/15 | 104/1 116/24 | 172/10 172/11 | 1 163/2 | workarounds [1] |
| 71/16 71/18 71/22 | whose [3] 26/19 98/15 | wished [1] 43/7 | 164/25 164/25 166/7 | 27/16 |
| 76/24 79/12 80/22 81/2 | 152/13 | with [175] 1/21 3/12 | 168/8 172/9 173/2 | Workbook [1] 4/7 |
| /17 81/19 81/20 82/6 | why [22] | $57 / 19$ 11/20 12/1 | 173/11 | workbooks [4] 4/8 |
| 82/7 82/8 82/9 83/9 | 35/21 42/4 45/23 50/2 | 12/6 13/12 15/20 16/8 | with it [1] 13/12 | 4/10 4/24 5/19 |
| 86/24 86/25 | 70/7 78/16 80/23 85/6 | 17/9 17/10 17/16 18/16 | with' [1] 34/9 | worked [3] 49/15 82 |
| 88/23 93/3 93/5 94/1 | 88/18 103/12 107/8 | 19/4 21/6 22/2 22/8 | withholding [1] 121/6 | 83/12 |
| 94/3 94/5 94/6 95/24 | 115/21 117/21 140/5 | 22/18 23/6 23/17 23/19 | within [24] 2/16 16/5 | working [10] 23/20 |
| 94/5 94/6 95/24 | 149/12 149/17 156/23 | 24/24 25/17 25/21 | 16/6 23/22 29/2 44/16 | 55/6 69/22 111/18 |
| 113/24 117/13 118/13 | 157/10 162/15 165/24 | 25/25 28/12 28/25 | 46/5 55/3 58/13 60/8 | 2/5 125/1 125/22 |
| 119/3 121/4 131/17 | wide [6] 90/3 102/23 | 29/19 29/21 31/22 | 60/18 95/19 114/16 | 125/25 127/2 155/20 |
|  | 109/8 110/7 112/14 | 32/18 33/20 34/13 | 122/4 127/12 139/11 | workload [1] 24/1 |
| 138/1 139/1 140/23 | 122/3 | 35/21 36/8 40/4 40/16 | 143/22 152/6 152/21 | works [1] 150/22 |
| /17 | wide-ranging [1] | 43/5 44/3 44/7 44/17 | 153/10 157/17 157/20 | workshops [1] 7/17 |
| 145/7 148/1 150/5 | 122/3 | 44/18 45/6 48/9 48/14 | 165/3 168/3 | worry [1] 131/5 |
| 150/15 152/22 153/1 | wid | 49/9 51/20 52/3 52/10 | without [18] | h [2] 96/24 1 |
| 153/18 156/17 158/15 | 149/10 149/16 | 53/20 54/13 55/5 56/1 | 51/21 63/17 65/1 68/8 | worthy [1] 156/9 |
| 162/3 163/10 164/21 | wider [7] 33/14 106/22 | 56/15 57/11 57/14 | 85/1 85/2 93/8 96/7 | would [105] 3/24 4/18 |



