

IN THE MATTER OF THE POST OFFICE HORIZON IT INQUIRY

OPENING SUBMISSIONS (HUDGELL CP GROUP)

Introduction

1. These submissions in opening are made on behalf of the Core Participants represented by Hudgell Solicitors (“Hudgell CPs”). Hudgell Solicitors currently represent 64 Core Participants, each of whom was convicted following prosecution by the Post Office on the basis of Horizon evidence; and each of whom has since had their conviction quashed. They also represent many other clients seeking to challenge their convictions and others seeking compensation (including through the Horizon Shortfall Scheme).
2. The Inquiry heard a powerful summary of the unprecedented miscarriage of justice suffered by our clients, and the events which led to it, in Counsel to the Inquiry’s opening in Phase 1. We anticipate Counsel to the Inquiry (“CTI”) will provide a further introduction to the events of the last two decades and the evidence the Inquiry will hear. We note the Chair’s guidance that openings by CPs are not expected to cover every Phase and we do not attempt to do so at this stage (21 July 2022).
3. These submissions are made before our clients have had an opportunity to consider any of the opening submissions of the other CPs or that by CTI. The process of gathering witness evidence and disclosure of statements and documents continues. We may expand upon or revisit these remarks in oral submissions.
4. These submissions do not prejudge the consideration of documentary and witness evidence by the Inquiry in the months to come, but identify issues and questions for exploration (including in some of the disclosure received by the Inquiry). We underline the public interest in this Inquiry and the personal importance for all of those affected by the Post Office’s vehement and catastrophic defence of Horizon. The Inquiry is the culmination of a long and continuing fight for justice and accountability.

5. Briefly, our submissions follow four themes:

- (a) The Significance of the Inquiry;
- (b) Priorities for Phase 2;
- (c) Questions for Phase 3 and beyond;
- (d) Recovery, Redress and Responsibility.

(a) The Significance of the Inquiry

(i) The Worst Miscarriage of Justice in Modern Legal History

6. Jason Beer KC, CTI, has said the Inquiry may – in due course - conclude that the prosecution and conviction of our clients is the worst miscarriage of justice in recent British legal history [**Transcript, 14 Feb 2022 9:9**].

7. CTI then acknowledged that the Court of Appeal has already described these convictions as an “*affront*” to the conscience of the Court.

8. What happened after the introduction of Horizon *was* the worst miscarriage of justice in modern legal history. While it may have taken decades for the Post Office (and the Government) to accept that Horizon was not remotely robust; the Post Office has since accepted that they secured many hundreds of convictions based on Horizon data.¹ The Inquiry has admirably encouraged those who may have been affected to come forward. For example, the Chair has noted that the number of people who have had their convictions quashed is considerably less than those who were convicted and he has encouraged witnesses who gave evidence in Phase 1 to share how they came to speak out [**Transcript, 15 February 2022, 65:22**]. The role of the Criminal Cases Review Commission must not be forgotten in all of this. It similarly has taken significant steps to try to secure justice for those who continue to live with a wrongful conviction.

¹ See HC 1267, Tenth Report of 2021-2, *Post Office and Horizon – Compensation: interim report. Government Response to the Committee’s Eighth Report*, p3: “As of 25 March, there were 955 postmasters identified as having received criminal convictions relating to their involvement with the Post Office from the period in question. Of these, 706 were prosecuted by the Post Office, 203 were prosecuted by other bodies and 46 were not based on evidence connected to Horizon”.

9. The 80 convictions quashed so far represent only a fraction of the total number of lives destroyed by the Post Office's approach to Horizon.
10. The opening of this next stage of the Inquiry's work presents a further opportunity to encourage others to come forward, be heard, to tell their stories and clear their names.
11. However, those we represent appreciate that many may not have the resilience to reopen a now decades-old trauma. As our clients have been, others may be mentally and physically broken by the impact of their conviction and what came next. Our clients ask the Inquiry to remember that for those who may never come forward, the Inquiry will be an important public statement capable of reiterating the truth. The scale of the scandal and its' wider impact beyond the CPs represented in these hearings should not be forgotten.

(ii) *Building on what we know*

12. The Inquiry does not start with a blank page. Its terms of reference provide that to establish a clear account of the implementation and failings of Horizon and the Post Office's actions in respect of alleged shortfalls it must "*build*" upon the findings in the civil and criminal courts (Terms of Reference B).
13. What we do know is substantial. The *Common Issues* judgment is 336 pages long (*Bates & Ors v Post Office Limited No. 3* [2019] EWHC 606 (QB));² *Horizon Issues* is 313 pages long (and its separate technical Appendix is 114 pages) (*Bates & Ors v Post Office Limited No. 6* [2019] EWHC 3408 (QB)).³ The judgment in *Hamilton* is 92 pages (*Hamilton & Ors v Post Office Limited* [2021] EWCA Crim 577).⁴ The bundles of evidence available in each of those cases were substantial.
14. Since then, more information has come to light, both in the extensive disclosure to this Inquiry and through research and Freedom of Information Act requests by others.

² Herein, "*Common Issues*".

³ Herein, "*Horizon Issues*".

⁴ Herein, "*Hamilton*".

15. It would be disproportionate to underline all of the facts relevant to Horizon already established. However, as the Inquiry starts to further explore the evidence with witnesses and with the participation of the key parties, including the Post Office, Fujitsu and Ministers, several critical facts are worth clear emphasis:
 - 15.1. The Post Office can no longer deny the existence of a great many bugs in Horizon (*Horizon Issues*, [925], (See also, *Technical Appendix*)).
 - 15.2. Legacy Horizon was not remotely robust. Horizon Online (HNG-X) still had a significant number of bugs, errors and defects. Its robustness was “*questionable and did not justify the confidence routinely stated by the Post Office*” (*Horizon Issues*, [975], *Hamilton*, [50]).
 - 15.3. There were numerous bugs, errors or defects in Horizon capable of causing, and which did in fact cause, shortfalls in post office branches (*Horizon Issues*, [968], [967], *Hamilton*, [48]).
 - 15.4. There were problems experienced with Horizon “*almost from the outset*” (*Hamilton*, [39]).
 - 15.5. The Post Office knew that there were problems with Horizon. Post Office knew that different bugs, defects and errors had been detected well beyond anything which might be regarded as a period of initial teething problems. In short, they knew that there were serious issues about the reliability of Horizon (*Hamilton*, [121]).
 - 15.6. The persistence of reports made it impossible to assume that all the initial problems, and any subsequent teething problems had been resolved (*Hamilton*, [131]).
 - 15.7. Horizon itself did not alert SPMs to the existence of any such bugs (*Hamilton*, [48]; *Horizon Issues*, [968]-[969]).

- 15.8. The Post Office did have access to the causes of alleged shortfalls in branches, including whether they were caused by bugs, errors and/or defects in Horizon (*Hamilton*, [49]).
- 15.9. Fujitsu had the ability and facility to insert, inject, edit or delete transaction data or data in branch accounts, to implement fixes in Horizon which could affect data in branch accounts without the knowledge or consent of an SPM (*Horizon Issues*, [1001] – [1004]).
- 15.10. Those concerned with prosecution of SPMs clearly wished to be able to maintain the assertion that Horizon data was accurate, and “*effectively steamrolled*” over any SPM who sought to challenge its accuracy (*Hamilton*, [121]).

(iii) *Human impact*

16. The CPs we represent appreciate the Chair’s message of 30 September 2022 which acknowledged both the significance of Phase 1 and its “*deep impression*”. Our clients were grateful for the opportunity to speak about their experiences and to be heard. It was understandably a difficult and emotional process for many of them (and for their families).
17. The human pain and suffering laid bare for the Inquiry is the true tragedy of the last two decades of the Post Office’s conduct in respect of Horizon. Many lives were destroyed for no good reason. This pain and suffering continues for many SPMs and their families (We will return to issues of redress and responsibility at the end of these submissions).
18. The evidence as to human impact must remain at the heart of each Phase of this Inquiry. It must sit behind the exploration of every issue. It is that continuing human impact which must inform the Inquiry’s work; to ensure that every avenue to secure true transparency and accountability is now explored.

(iv) *Protecting Horizon?*

19. Some of these convictions were decades old when overturned. Horizon had been the subject of controversy for many years and yet, the Post Office continued to publicly and vocally defend its integrity.
20. It was not before December 2019 that the course of the litigation in *Bates & Others v Post Office Limited* forced the Post Office to face reality ([2019] EWHC 3408 (QB) (herein “**Horizon Issues**”)).
21. But that did not happen without the most heroic of struggles. Time and again, the Post Office took steps to repeatedly reiterate their indefensible position that Horizon was robust and our clients’ convictions were safe. For example, in the Post Office response to the original letter before claim in *Bates & Ors* (“the GLO claim”) [POL00030211] (Emphasis added):

“Post Office has not ignored those concerns but addressed them head on, taking its responsibilities extremely seriously.

1.2 Numerous discussions have been held with stakeholders including government ministers, MPs, representatives of the Justice for Subpostmasters Alliance (JFSA), the Criminal Cases Review Commission (CCRC), the media and of course hundreds of postmasters. Post Office also engaged a third party, Second Sight, independently to investigate Horizon and then created and funded the Complaint Review & Mediation Scheme (the Scheme) to address the individual concerns of postmasters. Thousands of hours of investigations have been conducted and tens of thousands of documents have been disclosed.

1.3 Despite all this scrutiny, a systemic flaw in Horizon, or Post Office's operating practices, has not been identified that has resulted in a postmaster wrongfully being held liable for a shortfall of cash or stock in a branch. That is not to say that Post Office or Horizon are perfect. Post Office is alive to the potential for errors and this is why there are robust procedures in place to ensure that postmasters can detect and resolve errors in their branches.

1.4 The investigations to date have consistently pointed towards human error or dishonest conduct in branches as the most likely cause of shortfalls.

22. This was indicative of the stance which had been taken consistently by the Post Office over many years, as recognised by Mr Justice Fraser and by the Court of Appeal. We do

not repeat the examples here, but the Post Office's defence of Horizon extended to statements to the press and to Parliament.

23. It will, of course, now be for the Inquiry to consider that position, the statements made and the motivation behind them. When and how – and why - did preserving the integrity of the Horizon system become more important than the Post Office's integrity as a prosecutor and its commitment to its SPMs? Were these statements made in good faith? Did they evidence poor judgement or was there another explanation for them?
24. The Inquiry will recall that the Post Office expressly made submissions to Mr Justice Fraser on SPMs credibility, alleging at least one had "*lied frequently and brazenly*" (***Common Issues***, [57]). The conclusion of Mr Justice Fraser in the Horizon Issues Judgment in December 2019 bears repeating. His view was that the approach of the Post Office to the evidence showed:

“a simple institutional obstinacy or refusal to consider any possible alternatives to their view of Horizon, which was maintained regardless of the weight of factual evidence to the contrary. That approach by the Post Office was continued, even though now there is also considerable expert evidence to the contrary as well (and much of it agreed expert evidence on the existence of numerous bugs.)

This approach by the Post Office has amounted, in reality to bare assertions and denials that ignore what has actually occurred, at least so far as the witnesses called before me in the Horizon Issues trial are concerned. It amounts to the 21st century equivalent of maintaining that the earth is flat.” (***Horizon Issues***, [928] – [929]).

25. Understanding why the Post Office adopted this approach and the motivation for it is a crucial exercise for this Inquiry.

(v) *The Wider Public Impact*

26. While the detailed and forensic judgments of Mr Justice Fraser in the GLO trial marked a departure from the past; these judgments were based on evidence which was limited. It did not include material later disclosed to the criminal appeals and now available to this Inquiry (to give one example, of many, Mr Justice Fraser was unaware of the

existence of the 2013 legal advices referred to in *Hamilton* and subsequently as the “Clarke Advices”).

27. The consideration of our clients’ criminal appeals was properly limited to the evidence needed to address the safety of their convictions.
28. In both the GLO litigation and the criminal appeals, there was limited opportunity to look at all of the relevant parties in play or relevant evidence they might hold. There was essentially no role for Fujitsu (other than to either be praised in the GLO, or blamed in the criminal appeal process, by the Post Office), or for central Government, despite the key roles both played. There are no such limits placed on this Inquiry.
29. The wider public significance of this Inquiry therefore cannot be understated. The full financial and human cost of this public scandal is as yet unknown.
30. No individual or institution has truly been held accountable for what happened to those we represent or the damage which resulted to them and their families, or for the harm to the Post Office as an institution, or for the cost to the public purse.
31. The key commercial players in Horizon continue to play an important (and expensive) role in public life in the UK. In recent months, the Government has reportedly concluded new multimillion pound commitments to Fujitsu in respect of a range of crucial public services. On 24 September, it was reported that the Home Office has concluded a four year, £48m contract for the Police National Computer; HMRC has reportedly concluded a five year deal worth £500m; and the Foreign and Commonwealth Office has reportedly awarded Fujitsu a £44m telecommunications project. These deals follow on the heels of a £6.1m bill for services provided during the Commonwealth Games.⁵ A deal has reportedly been reached with Libraries NI reportedly worth £27m.⁶ In the last five years, Fujitsu has (before these deals) reportedly signed deals worth £673m with HMRC, £456m with the Home Office and £572m with the Ministry of Defence.⁷ The

⁵ Daily Mirror, *Firm behind Post Office scandal given £48million to run Police National Computer*, 24 Sep 2022

⁶ Newsletter, *Libraries NI and Fujitsu announce new £27m strategic partnership*, 22 September 2022.

⁷ Computer Weekly, *Fujitsu bags £430m government contracts despite rising cost of Post Office Horizon scandal*, 4 April 2022.

understanding that Horizon was not remotely robust has so far seemingly had little or no impact on the commercial relationship between Government and the architects of that programme.

32. The true impact of these events on the Post Office can only be determined after the conclusion of this Inquiry and the full and fair compensation of all affected. The damage which has been done cannot be understated. As Coulson LJ observed in refusing permission to appeal the Common Issues judgment (at [11]):

“The PO describes itself as ‘the nation’s most trusted brand’. Yet this application is founded on the premise that the nation’s most trusted brand was not obliged to treat their SPMs with good faith, and instead entitled to treat them in capricious and arbitrary ways which would not be unfamiliar to a mid-Victorian factory owner (the PO’s right to terminate contracts arbitrarily, and the SPMs alleged strict liability to the PO for errors made by the PO’s own computer system, being just two of many examples).”

33. The Post Office continues to provide a vital public service in communities across the United Kingdom, supported by the energies and commitment of a network of branches operated by SPMs. It is perhaps telling that the Annual Report of the Post Office for 2020-21, opens with a Joint Statement by the CEO and the Chair on *“Redressing the wrongs of the past”*:

“We know that, for genuine progress to be made, the full history of this scandal must be brought to light.

But, as well as righting the wrongs of the past, we have a responsibility in the here and now to improve our business and ensure that these events can never happen again. The oral hearings have reinforced our determination to learn from our failings and to continue to change the Post Office for the benefit of our Postmasters. In doing so, by fully addressing the past, we can rebuild confidence in the Post Office, which remains so essential to communities across the United Kingdom.”

[...]

“Post Office simply matters too much to today’s Postmasters, customers and communities across the UK. In short, we must and will put this right.”

34. The Post Office remains an entity essentially owned by the public. As citizens and as taxpayers, we *all* have an interest in the outcome of this Inquiry.

(vi) *The “Overriding Duty”*

35. We note the recent statement by the Chair that the Inquiry hopes to complete the process of evidence gathering in 2023.
36. Our clients welcome the recognition by the Chair that any desire to provide answers quickly must be tempered by an “*overriding duty*” to lay bare “*who knew what, when did they know it, and what did they do with the knowledge they acquired*”.
37. Those we represent appreciate there must be a balance to be struck between speed and efficiency on the one hand, and effective, searching scrutiny on the other. They appreciate that the task of the Inquiry is considerable and would *not* favour speed over a full and fearless examination of the events of the last two decades.

(vii) *Bringing the full history of the scandal to light*

38. Those we represent welcome the commitment of all CPs to the Inquiry. We have welcomed the decision by the Post Office to waive legal privilege and note the commitment to now bring light to the full history of the scandal (see above). This would truly represent a sea change in the approach of the Post Office.
39. After decades of apparent obfuscation and denial, our clients remain understandably cautious and concerned that a reversion to defensiveness or aggression on the part of *any* CP should not be permitted to undermine the ability of the Inquiry to finally uncover the truth.
40. The Inquiry will be well familiar with the criticisms of Mr Justice Fraser as to the approach of witnesses for the Post Office in the GLO litigation. He described the Post Office style of giving evidence in the following terms: “*This was to glide away from pertinent questions, or questions to which the witness realised a frank answer would not be helpful to the Post Office’s cause*” (***Common Issues***, [375]).
41. The Inquiry has encouraged constructive and open participation in the inquisitorial process by all CPs and witnesses. As the Inquiry starts to take oral evidence from those

who played a key role in Horizon and in decision making at the Post Office, at Fujitsu and in Government; the commitment to openness and transparency must continue.

(b) Phase 2 Priorities

42. Phase 2 will examine the development, roll out and the early days of the Horizon system.

43. This will necessarily begin with technical evidence from the Inquiry expert, Mr Charles Cipione, designed to support public understanding of the operation of Horizon and later evidence yet to come.

44. Our submissions in opening focus provisionally on three themes which go beyond the technology.

(i) Systems: Technical and Human

45. Despite the name of this Inquiry, this scandal is not all about technology, but also about the human systems which surround it, which *may* depend upon it and which *may* exploit it.

46. The Inquiry may hear expert analysis from Mr Cipione on what some of our clients have known for decades and was confirmed in the *Horizon Issues* judgment. There have been bugs, errors and defects in Horizon from the outset. Specifically, those bugs, errors and defects were capable of undermining the accounting integrity at individual branches: “*A persisting issue related to AI 376 (accounting integrity); payment and receipt imbalances were common symptoms with varied causes*” [EXPG0000001_5] and “*A noticeable symptom of these issues was a recurrent balancing problem experienced by the SPMs, which directly degraded the accounting integrity of the Horizon IT System*” [EXPG0000001_5]. However, the Inquiry may also explore with Mr Cipione whether there were “*human*” systems problems allied to the operation of Horizon. For example, in connection with the user support offered to SPMs and in the error resolution systems operating at Fujitsu [EXPG0000001_5].

47. The witnesses to be called in this Phase suggest that the Inquiry appreciates the need to avoid being solely focused on the technology. It will hear from management both at the Post Office and at ICL. It will also hear from officials and Ministers in Government at the relevant time; including from the Department for Technology and Innovation, the Department for Social Services, the Treasury and 10 Downing Street.
48. In order to appreciate the significance of who knew what when, the Inquiry must understand the history of Horizon and its development (and the significance of the project for the key players) and the operation of the “human” systems surrounding the development and operation of Horizon. Our clients consider this is likely to be at least as important as an understanding of the technical nature of the problems which arose.

(ii) *The Bigger Picture*

49. The Inquiry IT expert, Mr Cipione, includes in his written evidence a reminder of how very different the world was in the mid-90s – 2000 [EXPG0000001_27 at [4.5.5]]. In order to appreciate and effectively scrutinise the evidence in Phase 2, we will all have to be reminded of the state of the world almost two decades ago.
50. It is well known that Horizon did not start its life only as an accounting system for the Post Office. The Inquiry cannot begin without acknowledging that this Horizon scandal might be seen as a continuation of an earlier scandal already picked over by both Parliament and by the National Audit Office, to considerable public embarrassment for Fujitsu, the Post Office and for Ministers. It might then have been presented differently, and, may in fact, looked different, but by July 2000, both Parliament and the National Audit Office had concluded coruscating inquiries into the failure of the then “*Pathway*” project begun by both the Post Office and the Benefits Agency.⁸
51. In the mid-90s, the Post Office was well aware that its processes and technology were antiquated. However, early attempts to explore digitisation had gone nowhere.

⁸ Although this project was also called “*Horizon*” and ICL Pathway continued to be the provider; these submissions call this part of the project “*Pathway*” for ease of reference. See NAO, The Cancellation of the Benefits Card Project, 27 July 2000.

52. In Spring 1995, the Post Office joined together with its then biggest customer, the Benefits Agency on a joint project which would see the creation of a “Benefits Payment Card” which would see benefits payments continue to be paid by the Post Office using a government owned swipe card (see e.g. [HMT00000034_10 from [2.1]).
53. This would assist the Benefits Agency (an agency of the Department of Social Services (“DSS”)) by reducing loss to fraud. The commercial benefits to the Post Office of retaining the business of the Benefits Agency were considerable. This contract and footfall from benefits recipients was considered critical to the maintenance and sustainability of the Post Office network. The automation of the Post Office – Post Office Counters Limited (“POCL”) - was to form part of this project. Automation was the second objective designed to “*support processes to improve competitiveness, increase efficiency and to enable greater commercial opportunities for POCL*”. An objective of the project would be to ensure the full and speedy reconciliation of benefits payments, with accounting arrangements consistent with recognised accountancy practices (see Memorandum of Understanding, [DWP00000001_6], 11 April 1995). The Inquiry may wish to consider whether at any time this aspect of the project was treated as a priority; or as ancillary to the primary goal of making a Benefits Payment Card which would work.
54. This was to be one of the Government’s first – and perhaps most ambitious – Private Finance Initiative (“PFI”) projects dealing with IT. A consortium led by International Computers Limited (“ICL”), a subsidiary of Fujitsu, called ICL Pathway (herein “ICL”) was identified as the successful bidder. Contracts were signed in 1996.
55. Yet, by 1997, both the Benefits Agency and the Post Office had put ICL on notice that they were in breach of contract following considerable delays and failures to meet contractual milestones (see [DWP00000004] and [POL00028442]).
56. The Inquiry may hear evidence on protracted negotiations in 1998 and 1999, involving Ministers and officials, POCL, ICL and Fujitsu. For example, on 12 April 1999, there was a meeting involving the Prime Minister and Fujitsu, in London. The Inquiry might consider what information was passed to Ministers and officials by POCL and by ICL? And might also ask what were the primary considerations for each of the key players at this stage and beyond?

57. By 24 May 1999, the joint project had collapsed. Government policy changed and there would be no Benefits Payment Card. The Benefits Agency (“BA”) withdrew, the PFI arrangement was ended and POCL contracted with ICL for the automation of its services. Horizon became a Post Office only project.
58. A contract between ICL and POCL was settled in July 1999, with contractual “Acceptance” of Horizon scheduled for September 1999 and roll out nationally planned for 2000. This was a “turnkey” contract for services without any PFI element. In due course, the Inquiry may wish to explore the terms of this arrangement to consider the rights and obligations of the parties relevant to both Acceptance and roll out of Horizon.
59. In July 2000, the National Audit Office reported critically on the failures of the Pathway PFI project. The NAO principally focused on the role of the DSS, the Treasury and DTI. Their examination of the role of Post Office Counters Limited and ICL Pathway was more limited (see Executive Summary, [13] (Copies at [FUJ00083816] and [POL00000805])).
60. Reporting in 2016, Computer Weekly noted that even then, the Post Office refused to call the “Pathway” project a disaster. Indeed, Liam Foley, then business development director for ICL Pathway said: *“The idea that Pathway is dead and Horizon is alive is wrong. The project has always been known as Horizon.”* [POL00000890].
61. An important question for the Inquiry may be why the decision was taken to proceed with Horizon at all?
- (iii) *What was known when and by whom?*
62. From the earliest stage, it appears that concerns were expressed over the technical aspects of the ICL bid. The NAO noted: *“Pathway submitted narrowly the cheapest of the three bids, but the purchasers ranked their proposal third on eight of eleven technical and management criteria”* (Executive Summary, [25] (Copies at [FUJ00083816] and

[POL00000805])). This appears to be reflected in the documentation disclosed to the Inquiry.

63. The Inquiry may wish to consider whether there were adequate systems in place throughout the life of the project to ensure that the technical performance of Horizon was adequately and consistently scrutinised both by POCL and by Government.
64. There are crucial points at which the Inquiry may wish to press witnesses to explain their understanding of the technical issues in Horizon.
65. The Inquiry may wish to consider whether there is evidence to support that POCL was well aware of bugs, errors or defects even in the late development of Horizon and that these were bugs and flaws which were capable of affecting accounting integrity and which did directly impacted upon the integrity of branch accounts. The Inquiry might consider whether there is evidence that these were apparent before the decision taken on 24 May 1999 that POCL would continue its work on the Horizon contract with ICL.
 - 65.1. For example, the Inquiry has received a Transformation Steering Group established by POCL met regularly and produced Progress Reports. In a Progress Report for November 1998 [POL00028320_6], Red Light issues were identified for Horizon: *“There are major concerns about the test results emanating from Model Office and End to End. The results indicate that cash accounts and transaction data delivered to POCL's downstream systems lack accounting integrity, all of which raises serious doubt about Pathway's ability to enter into the next phase of Model Office and End to End testing without some form of remedial action”*. This document identified concerns about the testing process and its ability to detect major faults: *“The testing strategy is not being deployed as originally planned. There is evidence that the early phases of testing are not covering the scope that they should, and there is a danger that the true purpose of MOT testing will be lost, that major faults will be detected during it, and that this will result either in delay or in workarounds originally planned.”* A handwritten note adds that remedial action was now underway: *“The point must be that we will not enter the final phase of testing until we are content that we have a robust set of code”*.

- 65.2. In March 1999, a Programme Risk Status Report for POCL Horizon Programme identified red RAG status for numerous risk factors associated with the Horizon project including ability to support POCL business:

“Due to a lack of adequate visibility of the ICL Pathway design, and the lack of support from the contract to leverage this visibility, we have been unable to gain a high level of assurance in the adequacy or suitability of the service to support POCL business. POCL therefore risks the implementation of a service in Live Trial and beyond which will have negative operational impacts, resulting either in a level of service degradation or a delay to the start of the National Roll Out.”

[POL00028370_9]

The Inquiry may wish to consider evidence as to whether there was adequate transparency in the arrangements between POCL and ICL to ensure that POCL was adequately able to scrutinise the effectiveness of Horizon. The Inquiry may wish to consider whether, if there was evidence of concerns about a lack of transparency, what was the reason for those concerns, and what actions, if any were taken to address any issue?

- 65.3. In May 1999, a document disclosed to the Inquiry and identified as a Treasury briefing appears to confirm that POCL did not yet consider that the Horizon software was fit for purpose: *“POCL believe the Horizon hardware and software is probably sub-optimal as the platform for providing network banking and Modern Government services, but would need several months’ work to have a clearer view. They are therefore unable to take a view on whether the Horizon hardware and software is preferable to the system they might procure following termination.”* **[POL00039931_1 at [4]]**

- 65.4. On 12 May 1999, in a memorandum disclosed to the Inquiry, John Roberts briefed the Post Office Board: *“HMT seem to be driving towards some sort of deal with ICL to avoid a potentially messy termination situation to meet Ministers’ wishes and would see termination taking the course of a negotiated settlement at a risky and early stage (despite our best legal advice to the*

contrary). They have neither included us in many of their approaches to ICL and have ignored our comments when they have requested them, nor have dealt with our considered requests around the consequences of these approaches on the Post Office.” [POL00039916_2 at [12]]

- 65.5. This briefing included that POCL would be “*contracted to having an IT infrastructure that will not be optimal as its business requirements are likely to change following the BA Payment card being stripped out from the design.*” (Emphasis added) [POL00039916_4 at [15]]
- 65.6. If there was evidence POCL and Fujitsu were aware that there were continuing bugs, errors and defects in Horizon in May 1999, the Inquiry may wish to consider why the project was reconstructed rather than terminated? And what role, if any, this information played in a decision to proceed?
66. The Inquiry may hear evidence that there were numerous issues – “Acceptance Issues” or “AI” – of which POCL and ICL were aware before contractual acceptance of Horizon and the start of the national roll out.
67. These included concerns both about the support available to SPMs and the operation of the helpdesk, as well as specific concerns about the integrity of accounting data (including incidents arising as a result of receipts and payments failing to balance on the cash account).
- 67.1. As the Horizon Issues judgment found, these bugs, errors and defects went beyond “*teething problems*” [Hamilton, [121]].
- 67.2. The Inquiry will wish to consider what evidence there is that the “Acceptance Incidents” known to POCL – and in particular, those Incidents relating to accounting integrity – including AI 376 - were ever resolved satisfactorily before or during rollout.
- 67.3. The Inquiry may hear evidence on documents which point to a recommendation of a complete redesign and rewrite of parts of Horizon (the EPOSS) by ICL in

September and October 1999: [FUJ00079782] (see, for example, Witness Statement of Terry Austin, [26] [WITN04190100_12]).

67.4. A Third Supplemental Agreement was settled by POCL and ICL in January 2000. This acknowledged that as at 19 January 2000, the Acceptance Issues outstanding remained significant enough that POCL would be contractually entitled to suspend the roll out of Horizon. POCL agreed not to exercise its contractual rights [FUJ00118186_2, [D]-[E], 3 at [2.1]].

67.5. It was agreed that ICL and POCL would:

“continue to work together and to co-operate in the joint work programmes initiated” in respect of both “the development of operational procedures to support the accounting integrity control over the TIP interface”

and

“to improve the end-to-end management of reference data over the Core System.” [FUJ00118186_3, at [2.3]].

67.6. It appears that ICL gave a warranty as to their analysis of the effectiveness of certain proposed measures including an “Accounting Integrity Control Release design”, “Defences” and an “Attribute Checker” [FUJ00118186_4 at [5.1]].

67.7. It was agreed that, for a period, ICL would make available to POCL on request, expert assistance to explain its *“analysis of all root causes of Cash Account Discrepancies”* and the measures they have implemented in order to *“prevent the recurrence of any Cash Account Discrepancies, which would not have been detected by the Accounting Integrity Control Release”* [FUJ00118186_5 at [5.3]] (Emphasis added).

67.8. The Inquiry may wish to consider the steps taken after the signature of the Third Supplemental Agreement by both ICL and POCL, including in relation to detection, management and resolution of continuing bugs, errors and defects.

67.9. Specifically, the Inquiry may wish to consider whether, regardless of the defences and rectification measures being then proposed, POCL were on notice

in this Agreement that some continuing discrepancies would not be detected by ICL's systems and the root cause may require further work and/or investigation. It might also ask, would these deficiencies be identified other than by an SPM (or POCL) drawing it to the attention of ICL? And what systems (if any) were in place to ensure that where balancing problems were reported to POCL and to Fujitsu, these were routinely and adequately investigated for a root cause?

68. Regardless, the Horizon Issues judgment identifies bugs, errors and defects which were extant from the outset, and continuing, including from 2000 (see *Horizon Issues, Appendix 2*: For example, the *Callendar Square/Falkirk bug*: It was agreed that this bug was active between the years of 2000 and 2006).
69. The Inquiry may consider whether there is evidence in disclosure consistent with this conclusion and what action (if any) was taken by ICL and/or POCL to address those continuing incidents indicative of bugs, errors and defects. The Inquiry may wish to consider whether there were systems in place and steps taken by both ICL and/or POCL (and later POL) which were or were not adequate to reflect the seriousness of these imbalances both for the Post Office and for individual SPMs.
 - 69.1. For example, the Post Office has disclosed to the Inquiry a Monthly Incident Review prepared by the ICL Pathway Customer Service Management Support Unit for December 2000. This appears to record continuing numbers of incidents relating to receipts and payments imbalances.
 - 69.2. This appears to show that continuing errors were being communicated to the Post Office (at least during late 2000) and that these continued for some time after the signing of the Third Supplementary Agreement.
 - 69.3. This particular review appears to show imbalances relating to significant sums and significant numbers of branches affected each month. For example HSH Reference 0011101144 (a branch was reporting an imbalance of £7,100); 0011101163 (an imbalance of £8, 167.41); HSH 0011171091 (another imbalance of £3,054.00); and HS0010121703 (an imbalance of £36,042.02) [POL00029221_20-30]. In May 2000 there were 107 incidents recorded

relating to receipts and payments, and 445 non-polled offices [POL00029221_9]. This report identified where faults were known to be attributable to Horizon. Of the incidents closed by ICL in May 2000, 414 were found to relate to a fault in the Pathway (Horizon) system. By November, there were 44 incidents attributed to a fault in the system; and 40 attributed to no fault [POL00029221_13].

70. In that context, the Inquiry may wish to consider whether there was ever any evidential basis for POL's mantra that Horizon could be considered robust? The Inquiry is invited to consider, if it is satisfied that there was evidence of bugs, errors and defects from the outset, what reason or motivation there might be for Horizon to be viewed with such confidence by the key players.
71. The Inquiry is likely to hear pertinent evidence on the exigent commercial motivation for the original Horizon project. They may hear evidence from Ministers and officials and from Fujitsu on why the project was continued in Summer 1999 rather than terminated.
72. The Inquiry may wish to hear about the impact which the withdrawal of the Benefits Agency and the termination of plans for the Benefits Payment Card had for the business strategy and future plans of POCL. The Inquiry may hear this described as an "*existential threat*" to the business and the Post Office network (see, e.g. [WITN03770100_13, at [44]] (Anthony Oppenheim (ICL))). The Inquiry may hear that POCL had estimated that if all Benefits Agency income were lost, up to half of the then current network of 19,000 offices could close, and the remaining offices would need a subsidy to stay open [HMT00000034_5 at [1.5]].
73. At the same time, in 1999, the Government was consulting on the future of the Post Office. A White Paper, "*Post Office Reform: A world class service for the 21st century*" was published by the Blair Government in July 1999, two months after POCL agreed to continue its relationship with ICL. In an introduction, the responsible Minister, Stephen Byers, focused squarely on a Post Office building its future in technology:

"the Post Office needs transforming. It needs further modernising as customer demands change, as technology advances and as new players – from private courier services to e-mail providers – emerge. This White Paper shows how the

Government intends to deliver its pledge to provide a world class Post Office for the 21st century”

We have a vision of the Post Office as a thriving business:

[...]

- expanding into new areas of electronic and hybrid mail, and complete distribution arrangements;*
- making alliances with other players in the market;*
- overseeing a nationwide network of post offices equipped with the latest technology with a place in every high street and rural area to offer an increasing range of services for an ever greater number of clients*

[...]

This White Paper details the way we will set the agenda for a modern UK Post Office operating in global markets and providing high quality services to every user in the country.”

74. In March 1999, the Government published its White Paper: *‘Modernising Government’* (March 1999) (Cm 4310), which focused on the Government’s commitment to deliver just that: including a commitment to “Information Age Government” (or the digitisation of Government services): *“We must modernise the business of government itself – achieving joined up working between different parts of government and providing new, efficient and convenient ways for citizens and businesses to communicate with government and to receive services.”* This expressly included a commitment to *“Information age services for Post Office customers: The Post Office will be equipped with a modern on-line IT platform to facilitate electronic provision of government services across post office counters”*.
75. The Inquiry may hear evidence that POCL and ICL had been exploring commercial opportunities which could be built on the back of a successful Horizon roll out, from an early stage.
- 75.1. For example, disclosure to the Inquiry refers to work done preparatory to participation in tenders for Government Gateway work or work in partnership (“Golden Cloud” work). For example, an ICL document includes a Post Office Client Director’s Monthly Report, prepared in December 1998 which provides:

“Work has started with Govt Division on planning how Gateway/Golden Cloud should fit with ICL’s Government market plans” (see [FUJ00058198_47]).

- 75.2. It appears from the disclosure received, there may be at least some evidence that this intention for further commercial partnership formed part of the negotiations in Spring 1999 which led to the continuation of the ICL and POCL relationship. In April 1999, immediately before the Prime Minister met with Fujitsu, the Director of Posts commented on good progress in negotiations including a revised version of the “golden cloud” (the ICL/POLC partnership for exploiting the commercial potential of the Horizon infrastructure) (see [BEIS0000366_1]).
76. The Inquiry may also hear that, at precisely the time that POCL was being asked to scrutinise whether known faults in Horizon had been successfully resolved; POCL and the Post Office Board were invested in the development of options for the further commercial exploitation of the Horizon platform.
- 76.1. Even before Horizon had fully rolled out to all Post Office branches, POCL and the Post Office Board were considering Network Banking and the further exploitation of Horizon for potential Government Gateway contracts. In January 2000, the Post Office Board was informed *“The rollout of Horizon was due to recommence on 24 January. A great deal of work had been undertaken to rectify difficulties identified in three areas – system stability; - accounting integrity; - the provision of support to offices; Although as yet it was anticipated that these issues would not prevent rollout commencing.”* The Board was invited to consider marketing opportunities for Horizon [POL0000336_11].
- 76.2. In March 2000, the Post Office Board was informed that all project milestones had been met in the rollout of Horizon. By the end of March, 4,000 post offices would have Horizon installed: *“The Board supported the outlined approach for the commercial exploitation of the Horizon platform, recognising that more development needed to be completed before full commercially justified business cases could be justified.”* [POL00021469_8]. (By April, the Inquiry may consider there is evidence of the Board approving early participation in commercial tenders with ICL to provide government services based on Horizon

[POL00021470_2]: “*The Post Office was involved with ICL in a tender to provide electronic Government services – me.gov – in which the automated Post Office network would play a leading role.*”).

77. The Inquiry may wish to consider whether, on all the evidence, this kind of expansive consideration was premature. Again, the Inquiry may wish to explore the knowledge, understanding and motivation of the key players.
78. The Inquiry may wish to consider whether the Post Office Board was on notice of problems with accounting integrity and whether it took any or adequate steps to satisfy itself as to the future management and integrity of Horizon.
79. These decisions were being taken at a time of change both for the Post Office and for the Government. They were taken at a time when Fujitsu had, through ICL, invested considerably in a PFI-project which had collapsed without its promised returns.
80. The Inquiry may want to consider whether commercial considerations dependent on the success of Horizon had an impact on decision-making by the key parties. What role did these commercial – and, potentially, existential – considerations play in the decisions taken by the key players?
81. Was Horizon considered simply too important to the Post Office (and others) to accept that it continued to be plagued by bugs, errors and defects?
82. The Inquiry may wish to consider the relevance of this bigger picture to the decisions which were taken on the roll out of Horizon and the seriousness attributed to continuing technical problems with Horizon.
83. The Inquiry will hear from Ministers and officials as to their understanding of the extent of the difficulties with Horizon which were continuing before, during and after roll out. Was attention focused unduly on the commercial implications for Horizon? Was maintaining the relationship with Fujitsu a highly important factor whether for Government or for POCL?

84. Were Post Office Board Members and Ministers appropriately informed of risk? Were known and continuing technical difficulties “overlooked” or were they obfuscated? Was a blind eye turned in favour of saving face on a project which had already caused considerable embarrassment for Government?

84.1. For example, the Inquiry may hear from Alan Johnson as to his understanding of technical issues in 1999 – 2000: *“No one was flagging up major concerns; everyone’s attention was on the new work that Horizon could attract.”* [WITN0330100_16 at [45]] (Emphasis added).

84.2. The former Minister may go on to suggest that there was no way of knowing that errors in Horizon would be used to falsely prosecute SPMs [WITN0330100_16 at [45]]. That will, of course, be a question for the Inquiry.

85. It must also be for the Inquiry to consider what role wider commercial (and other) pressures played in *later* decision making by the parties. The extent to which knowledge of those flaws and errors in the development of Horizon did or ought to have informed the *later* actions of Post Office prosecutors (and the actions of the sponsoring Department) should be a question for further exploration with witnesses *both* in Phase 2 and beyond.

(b) Questions for Phase 3 and Beyond

86. We do not propose to rehearse in full the crucial issues for the Inquiry to explore in its remaining Phases. The list of 218 issues the Inquiry seeks to address is full. *Each* of those issues is significant for our clients.

87. Instead, we provisionally highlight a few matters which the Inquiry may wish to explore in the evidence yet to come. These are matters which will necessarily be informed by the evidence heard in Phase 2.

(i) *Reliance on Professional Reports, Advice and Reviews*

88. The reliance upon and the role played by professional reports, advice or reviews claimed to be expert or independent will be a repeated theme for consideration by the Inquiry. From the engagement of Second Sight and other professional consultants to the role of legal advice from legal practitioners, Simon Clarke, Brian Altman KC and Sir Jonathan Swift, and Lord Neuberger (whose engagement will be considered in later Phases) the CPs we represent consider that there will be repeated questions for the Inquiry to consider over the role of professional advisers and reviewers engaged by the Post Office (or others) to inform their position on Horizon.
89. The usefulness and relevance of these questions might become apparent in the comparison of two reports which may become relevant in Phase 2:
- 89.1. For example, the Project solicitors, Bird and Bird, commissioned advice from Project Mentors in 1998 and in 1999, provided to both the Benefits Agency and POCL. In 1998, POCL was informed that this expert consultancy was “*deeply concerned that their findings show a serious problem with the way in which ICL Pathway have developed the system. The impact of this is likely to be that there will be failures to meet essential user requirements, causing the need for extensive re-work before the system can be accepted and, potentially, operational problems if the system is rolled out.*” (see [POL00038829_5] (also at [POL00031114_2])). While this Report principally focused on the Benefits Payments Card, they did also comment on POCL specific systems: “*Of particular concern is the EPOSS system. We are informed that at a relatively early stage Pathway wanted the authorities, principally POCL to be involved with the design of this element...since the RAD experiment was abandoned, we have doubts whether any proper requirements analysis has been performed*” (see [POL00038829_14 at [2.34]]). The Inquiry may wish to consider what significance it was given, to whom it was communicated beyond BA and POCL and what actions were taken (if any) in response to these concerns. [The Inquiry might consider whether this analysis was somewhat prescient in connection with the apparent consideration (and rejection) by ICL of a possible re-design and re-write of the EPOSS. It appears far from clear whether these concerns were

communicated to ICL, or if the consideration of a re-write by ICL was communicated to POCL, or indeed whether it was contemplated that Project Mentors should or could be invited to comment further in respect of EPOSS].

89.2. By way of contrast, the Inquiry may hear that significant reliance was placed, by Ministers and others, on a report produced in July 1998 by a Panel described as an Independent Panel appointed by the Treasury and led by (now Sir) Adrian Montague (“the Montague Report”) (see [POL00028094]).⁹ Sir Adrian was at the relevant time the Head of the PFI task force. He was joined on the Panel by two wing Members, both senior civil servants. Their work was supported by a Secretariat from the Treasury and by PA Consulting. PA Consulting had previously reported on the Pathway project in 1997. The 1998 report concluded that the joint project was “*technically feasible*”. However, this top line was caveated. The Report in its detail expressed concern for operational issues (which would require management) and in particular raised problems with EPOSS (e.g. at [90])). Further “*there must remain some risk until the systems are connected together in earnest. The same is true of POCL’s parallel work on its feeder systems (Reference Data, TIPS, APS etc)*” at [31]. The Inquiry may wish to explore whether the conclusions of this Report (and its conduct) can bear the weight of the reliance which may be placed upon it. The Inquiry will hear evidence from Peter Copping, who led PA Consulting and from Sir Adrian Montague.

90. In the consideration of expert or independent input, the Inquiry may wish to subject the substance of any advice given to close scrutiny:

90.1. What were the instructions given and the scope of any adviser’s role? Were they given a full and accurate picture by those instructing them? Were they constrained in their task whether by resources, time, access or skill? If so, were those constraints due to the actions of the Post Office, Fujitsu or any other actor?

⁹ See also, The Treasury Independent Panel Report (59pp) dated 1 July 1998 at HMT00000034 (Review of the Benefits Agency/Post Office Counters Automation Project: Working Group Report, July 1998. A separate Working Group Report (91pp) published on 1 July 1998 appears as POL00039899. It appears to be a full copy of both reports combined)

- 90.2. What happened to reports when they were completed? To whom were they communicated or circulated? Were they secret? By whom were they read? Were they provided, for example, to Ministers or to members of the Post Office Board? If not, how were their messages distilled and communicated to decision makers?
- 90.3. Were advisers able to operate in a way which was truly independent? Did they exercise apparent and de facto independence from the parties? Did they have any relevant conflicts of interest?
- 90.4. Did the advisers appointed have the relevant skills and expertise necessary to advise on the questions posed in their instructions?
- 90.5. Were the advisers subject to any regulatory obligations or industry standards, relevant to the substance of their advice?
- 90.6. Finally, the Inquiry may wish to consider, in all cases, how the advice was received. Was all advice treated similarly? Or was there evidence of a “pick and mix” approach to advice taken?
- 90.7. The Inquiry may ultimately wish to consider whether advice supportive of Horizon was too heavily or readily relied upon, and advice critical of Horizon ignored or diminished?

(ii) Justice delayed

91. While not addressed in detail in opening, it should be without a doubt that one of the most significant concerns for our clients, if not the most significant concern, is the missed opportunity for the Post Office to accept at an earlier stage that their treatment was wrong. The Inquiry will revisit these issues in later stages, including but not limited to, the

consideration of the work of Second Sight and the Mediation Scheme led by Sir Anthony Hooper, as well as the Post Office's conduct of the GLO litigation.

92. This will be a repeated theme for the CPs we represent. While Phase 2 will establish who knew what at the earliest stages of the life of Horizon, this work must inform what comes next. There were many occasions when the Post Office refused to accept that the bugs, errors and defects in Horizon were known and relevant to its treatment of our clients. It will be a critical exercise for the Inquiry to consider the reasons why the Post Office took the actions it did – and who took them - against the background of what was known about Horizon, including what was learned in the process of its development and roll out; and in the process of its operation (in Phase 3).
93. For those we represent, this may be one of the most critical exercises for this Inquiry: to understand why the Post Office continued to insist Horizon was robust and why they were forced to wait for years for the acknowledgment of their innocence.
94. As the Inquiry has heard, each of these years were exceptionally hard years financially and emotionally for convicted SPMs and their families. Many lost loved ones during that time: they died without knowing that the SPM in question would be vindicated. As the Inquiry knows, not all SPMs have been able to survive to see the all-important decisions of 2019 or the apparent sea change in approach by the Post Office.

(iii) Preparation for Phases 3-7

95. The disclosure of witness statements, relevant exhibits and further documents continues on a daily basis. The identification of the Inquiry's proposed witnesses has come relatively late in the process. This cannot allow the capacity of our clients to assist in commenting on further evidence and on the witnesses called to be inhibited. As the Inquiry continues to prepare for the next Phase, the Inquiry may consider that the participation of CPs would be substantially enhanced by disclosing at an early stage which witnesses the Inquiry has asked to provide a witness statement and a list of the documents which the Inquiry team considers relevant to each witness's evidence. Timely disclosure of exhibits together with witness evidence is important for ensuring that our

clients are able to effectively participate and to assist the Chair and the Inquiry in their preparation for the examination of witnesses.

96. We stress that the many of the clients we represent hold unparalleled knowledge on the history of Horizon and on the actions of the key parties. They have already shown resilience and fortitude in pressing for justice before Parliament and in the civil and criminal courts. Their expertise, given time for due consideration and preparation, may considerably enhance the Inquiry's work.

(c) Recovery, Redress and Responsibility

97. The Inquiry has from the outset recognised the importance of prompt and tangible compensation for SPMs affected. Those we represent have repeatedly welcomed the proactive approach taken by the Chair and the Inquiry team to the question of compensation.

98. Again, we welcome, on their behalf, the decision to revisit the matter of compensation in a further hearing on 8 December 2022.

99. While full and fair compensation for every person affected remains an urgent priority for the clients we represent; it is by no means the *only* priority. This Inquiry serves an undeniable public purpose in seeking answers to the questions our clients have relentlessly pursued for decades in the face of defensiveness, dismissiveness and aggression.

100. Every review or report which previously failed to look behind the fiction that Horizon was robust, compounded the trauma of our clients and their families.

101. Failures in accountability and transparency cemented in the public record and in the public eye that they had been judged both dishonest and criminal. That they were offenders not only against the public good but against a most trusted and respected public institution: the Post Office.

102. Yet, they were *not* criminals. They were *not* dishonest.

103. Together they were mothers, fathers, sons, daughters and grandparents. They were former policemen, bankers and accountants and many others of good character committed to building a strong business serving their local communities. They were community volunteers and local councillors. They were parents starting out in life building on hope for their young families and those preparing for an enjoyable and well-planned retirement. They were first and second generation immigrant families. They were first and second generation Post Office families committed to public service and the institution over many generations. They were *all* committed to the Post Office and what they thought it stood for. They *all* trusted the Post Office. They were *all* broken by their experience.
104. They – and their families - all want to know *why* the Post Office, Ministers and so many others appear to have failed them.
105. In considering how this most unprecedented of miscarriages of justice came to pass there may be important learning on the role of trust, good faith and candour in the provision of public services.
- 105.1. It is only in seeking now to understand *why* these prosecutions were allowed to happen *and* why it took over two decades for the Post Office to acknowledge it was wrong, that lessons might be learned.
- 105.2. It is only in gaining an understanding of why they were made to suffer as they did that many of our clients will be able to start to truly recover and to rebuild their lives.
- 105.3. It is only in finding those answers that the damage done to the public trust might begin to be repaired.
106. Our clients are listening. They will be represented in the hearing room and online.
- 106.1. They hope that lessons will be learned; and that individuals and organisations accept accountability and responsibility where such is due.

- 106.2. They hope that no other person or family is failed like they were absolutely failed by publicly owned systems, public agencies and public officials again.
- 106.3. They now place their trust in the Chair and in the Inquiry team. They are committed to this Inquiry.
- 106.4. They intend to work with the Inquiry team and the other CPs to ensure that the full story of Horizon – *and* its key players – is finally told.

They call on others to do the same.

TIM MOLONEY KC
ANGELA PATRICK

HUDGELL SOLICITORS

4 OCTOBER 2022