

Independent Investigation into Capture Accounting Software

Prepared for
The Department for Business and Trade

Status
Final Report

Matter Number
E042387C

3rd Floor, The News Building 3 London Bridge Street London SE1 9SG



© Crown Copyright Department for Business and Trade, first published in 2024.

This information is licensed under the Open Government Licence v3.0. To view this licence, visit https://www.nationalarchives.gov.uk/doc/open-government-licence/

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to: Department for Business and Trade, Business Resilience Directorate, Post Office Policy, Old Admiralty Building, London SW1A 2BL.

This report was prepared by Kroll Associates UK Limited ("Kroll"), who were appointed by the Department for Business and Trade to undertake an independent investigation into Capture (hereafter the "Public Report").

Kroll assumes no liability to any third party for this Public Report, its interpretation or applications, or for omissions, or for reliance by any such third party. To the extent information provided in this Public Report is based on a review of publicly available records, such information, as presented, relies upon the accuracy and completeness of those records, which have not been corroborated by Kroll.

Statements concerning financial, regulatory or legal matters should be understood to be general observations based solely on Kroll's experience as risk consultants and should not be relied upon as financial, regulatory or legal advice. All such matters should be reviewed with appropriately qualified advisors in these areas. This Public Report does not constitute a recommendation, endorsement, opinion or approval of any kind with respect to any transaction, decision or evaluation, and should not be relied upon or disclosed as such under any circumstances.





Contents

1	Execut	Executive Summary		
	1.1	The Capture Accounting System	1	
	1.2	Capture: The Post Office Control Environment	3	
	1.3	Sub-postmasters' Testimony	4	
	1.4	Documentary Evidence	5	
	1.5	Examination of the Capture Software	6	
	1.6	Conclusions	8	
2	Introd	Introduction & Methodology		
	2.1	Introduction	10	
	2.2	Methodology	11	
	2.3	Allegations	16	
	2.4	Limitations	18	
	2.5	Structure of the report	23	
	2.6	Terminology	23	
3	The Ca	apture Accounting System	25	
	3.1	Background – the operation of the Post Office in the 1990s	25	
	3.2	The weekly reconciliation process	26	
	3.3	The rollout of Capture	27	
	3.4	Purpose and functionality	30	
	3.5	Suppliers	31	
4	Captui	re: The Post Office Control Environment	33	
	4.1	Approach	33	
	4.2	Observations	36	



5	Sub-postmasters' Testimony		
	5.1	Approach40	
	5.2	Observations	
6	Docum	entary Evidence 50	
	6.1	Approach50	
	6.2	Observations	
	6.3	Limitations	
7	Examination of Capture Software		
	7.1	Approach59	
	7.2	Observations	
8	Conclusions 68		
	8.1	Approach	
	8.2	Observations	
9	Append	dix – Privacy Notice	
10	Appen	dix - Capture Population Data74	
11	Appendix – Capture Versions		
12	Appendix – Capture Issues		
13	Appendix – Capture Disks collected from Postmaster 2		
14	Appendix – Image Files collected from Postmaster 4		



1 Executive Summary

Kroll Associates U.K. Limited ("Kroll", "We", "Us" or "Our") was engaged by the Department for Business and Trade ("DBT") on 29 May 2024 to conduct an independent investigation into Capture ("Capture" or "Software"), an accounting software used by sub-postmasters between 1992 and 1999 ("the Investigation"). Our Terms of Reference, which are covered in greater detail in section 2.1, have been primarily to provide a conclusion, based on available evidence (or if necessary, the balance of probabilities), as to whether there was a reasonable likelihood that Capture could have incorrectly created shortfalls for sub-postmasters, as claimed. The specific allegations raised around Capture are covered in section 2.3.

Given the time period of the Investigation was during the 1990s, that DBT did not hold relevant data associated with the Terms of Reference, and that much of the relevant data is likely to have been lost or destroyed, Kroll relied upon evidence and documentation gathered from numerous third-parties for this investigation, including Post Office Limited, current and former employees of Post Office Limited, Peters & Peters LLP (Post Office Limited's legal counsel), former sub-postmasters, and other sources that became relevant during the course of the Investigation. We thank all sources for their cooperation. Further details of our methodology are covered in section 2.2, as well as limitations placed upon our work in section 2.4.

This executive summary broadly follows the structure of the report, which is summarised in section 2.5.

1.1 The Capture Accounting System

The Capture accounting system was developed in house by Post Office Limited's Information Technology ("POIT") team. It was rolled out from 1992 and was replaced in late 1999 by the integrated Post Office Horizon software. Capture was initially offered to sub-postmasters for purchase at non-Post Office operated branches on an optional basis (although Kroll has identified evidence of two cases where Capture was a contractual requirement by the mid-1990s). The software could be purchased from Post Office Limited on a standalone basis, or as part of an integrated package including a printer and/or computer.

Development and rollout of Capture appears not to have been a centrally strategic project of the Post Office Limited at the time, and we estimate that a maximum of only 13.5 percent¹ of all branches may

¹ Based on a 1998 figure of 2,500 copies of the software being created (the highest number Kroll identified of potential Capture users), and 18,407 Agency Branches being in operation during the same year.



have been using it. There were at least two other systems (with similar functionality to that of Capture) that were in use by sub-postmasters during this time period, but these were not developed by Post Office Limited. The software was updated a number of times, and Kroll has identified reference to 19 different versions of the Capture Accounting System being released by the Post Office between 1992 and 1999.

During the 1990's, the operations of Post Office branches were highly cash intensive. Post Office branches provided various services (including receiving cash deposits from retail stores, paying out cash pensions and benefits, electronic GIRO transfers, and processing various types of licenses), in addition to core Post Office services such as selling stamps and processing letters and parcels. There were approximately 150 different types of services which were provided by Post Office branches on behalf of third parties and government departments referred to as "Clients" (including the then Department of Social Security for pensions). Although the volume of cash varied from branch to branch, we have been provided testimony that, in some cases, weekly cash volumes were up to £500,000.

Sub-postmasters kept individual accounting records (including cash accounts) for their branch, which were maintained independently of Post Office's own accounting system. A weekly cash and stock summary was produced by the sub-postmasters on a Wednesday afternoon, which summarized the aggregate of transactions undertaken over the last seven days, and the resulting expected cash and stock levels on hand as at the weekly closing. Sub-postmasters were responsible for sending their weekly cash and stock summaries to Post Office Limited's Finance Department ("PFD") every Wednesday evening, where, after a series of validation checks, the figures would be reconciled to Post Office Limited's own records and the records of the Clients, before the figures were entered into Post Office Limited's accounting system.

At the time Post Office Limited was developing Capture, sub-postmasters predominantly kept manual accounting records, and the preparation of the weekly cash summaries was time consuming due to the large volume of transactions that took place in a typical branch at the time. Post Office Limited's business case for the roll out of Capture stated that the aim of Capture was to help sub-postmasters balance their cash accounts more cost effectively and efficiently. Capture was in essence a back-office processing software that automated certain calculations, and its functionality has been described as similar to an Excel spreadsheet. If a sub-postmaster was using Capture, they would print their weekly cash summary from the Capture software, and this was then sent to PFD and reconciled as described above.

"Shortfalls" arose from differences between cash/stock on hand and the cash/stock per the weekly cash summary. According to our review of the template sub-postmaster contract (which we understand was in use during the mid-1990's), sub-postmasters were held legally responsible for any losses of cash or stock resulting from negligence, carelessness or error. Based on testimonial evidence, this responsibility



was understood by the sub-postmasters that all cash and stock held by branches were the property of Post Office Limited and any shortfalls were required to be reimbursed (or "made good") by the sub-postmaster.

1.2 Capture: The Post Office Control Environment

Post Office Limited had numerous control mechanisms in place to ensure that the data provided to it by sub-postmasters was accurate. In addition to the checks and reconciliations conducted by Post Office Limited described above, regular audits were also conducted on all branches. According to interviews conducted by Kroll, each region had an audit team, and branches were selected for audit by the audit manager of each region. Branches were typically audited every 18 months to 39 months. Audits would usually last a day, and auditors undertook a series of standard audit procedures, which included testing the cash and stock on hand in comparison with the weekly cash summary held by PFD.

If significant issues were identified during the audit (including a significant shortfall), sub-postmasters could have been immediately suspended pending further investigation by Post Office Limited's investigation teams. Following the results of the investigation, Post Office Limited could take subsequent action including termination or in some cases, prosecution of the sub-postmaster.

Based on the information Kroll has been provided with to date, it appears that issues with Capture (and in particular the possibility of bugs/errors in the Capture Accounting System resulting in incorrect financial information) were not specifically considered as a possible contributing factor to shortfalls by these control functions:

- Firstly, we have identified evidence from interviews that issues with Capture were not reported
 to Post Office Limited's control functions (for example the audit teams and the investigation
 teams). However, we have not been able to corroborate this statement in any documentary
 evidence available during the course of our investigation.
- Secondly, we have been provided with testimonial evidence from several sub-postmasters who indicated that issues with Capture were raised by them to Post Office Limited. We have also been informed that in two cases, issues with the Capture Accounting System or the hardware provided by Post Office Limited were considered and/or used in defense of a prosecution. Based on the documentation available to Kroll at the date of writing this report, we are not able to comment on how Post Office Limited responded to these communications at the time.



1.3 Sub-postmasters' Testimony

Kroll conducted 21 fact-finding interviews with former sub-postmasters and/or their families, who used Capture and offered their support to the investigation. One further sub-postmaster provided written testimony. Eight sub-postmasters who were subjects in this investigation have sadly passed away in the intervening years between their Capture usage and Kroll's engagement and were represented by family members familiar with their individual cases.

12 sub-postmasters that formed part of this dataset were suspended by Post Office Limited, with eight subsequently being prosecuted, two resigning and two being terminated from their employment. A further seven sub-postmasters were never suspended, but advised Kroll that they ended up selling their branch, in part or whole, due to losses they sustained during the period when they were using Capture. It should be noted that for three sub-postmasters who came forward during the investigation, Kroll found that they were not in fact Capture users, and Kroll liaised with DBT to direct them to appropriate recourse channels if required. For a further five sub-postmasters, all deceased, we have been unable to fully confirm their usage of Capture through interviews or review of available documentary evidence.

The estimated range of losses, based on sub-postmasters' own disclosures, also varies. Nine sub-postmasters experienced losses of more than £10,000. Six sub-postmasters lost mentioned they lost an estimated £1,001-£10,000, and one sub-postmaster stated they lost between £1-1,000. For six sub-postmasters, the estimated losses are unknown. Kroll has not independently corroborated or calculated these estimations, and the figures are based on documentary evidence provided or interviews.

Whilst the accuracy and depth of recollections understandably varied across sub-postmasters, Kroll was able to identify a number of key themes that became apparent over the course of interviews:

- There was an inconsistency in the level of training provided to sub-postmasters on Capture, which
 could vary from a dedicated training session to simply being provided with a copy of the floppy
 disks and the computer, if purchased by the sub-postmaster.
- Some sub-postmasters expressed concerns they were pressured to adopt and use Capture by
 more senior staff members, including Retail Network Managers and Area Managers. The basis of
 these pressures was due to the time and costs invested in Capture's development, as well as the
 efficiencies it was said to bring to post offices.
- A number of sub-postmasters raised that variations, including shortfalls and surpluses, began to be generated in greater frequency after the adoption of Capture, when compared to prior use of manual reporting.



- There were varying degrees of confidence in using computers by sub-postmasters, and contextually the computer used for Capture, in many cases, was the first one owned by sub-postmasters. As such, they were sometimes reliant on other staff members or Post Office Limited communications to identify and remediate issues that may have arisen. Five sub-postmasters commented they did not believe computers were able to "make mistakes". It should also be noted that at least three sub-postmasters ran Capture using their own computers the impact of this on Capture is unknown, given the testing was conducted for specific computer models used at the time (being Compaq 286 and 386 computer).
- There was a general awareness of circulars and communications sent out by Post Office Limited
 on Capture, which included references to bugs identified during testing, however three subpostmasters commented that they do not believe they received these circulars. Sub-postmasters
 were also generally aware of the Capture helpdesk; however its specific remit and effectiveness
 were questioned.

1.4 Documentary Evidence

Kroll gathered a set of documentary evidence from different sources, including Post Office Limited, a subset of former sub-postmasters who retained documentation related to their Capture use, as well as two former employees of Post Office Limited, Former Employee 1 and Former Employee 2, who had conducted their own enquiries prior to Kroll's engagement. Kroll were also made aware of various datasets accessible by Peters & Peters, Post Office Limited's external legal counsel, however access to the search results from these datasets was only provided on 21 August 2024, the day Kroll presented its draft report to DBT. As such, a review of these datasets has not been undertaken.

It was evident from documentation gathered from October 1992 that periodic performance-related reports were produced internally at Post Office Limited, which the late 1992 report noting that users who purchased the software only package for Capture (i.e. excluding the Compaq computer) were taking up a "disproportionate amount of time" in resourcing and "may impact upon mainstream activities such as fault fixing and development work".

Documentation gathered by Kroll makes clear that there was publication and awareness of Capture experiencing errors and bugs throughout its operating life, which were disseminated to sub-postmasters through periodic circulars, including Capture-focussed circulars like Captivation and Focus, and national publications Sub-postmaster and Counter Couriers. Release documentation provided to sub-postmasters also made reference to known errors and bugs identified during testing, that were then distributed to sub-postmasters. It should be noted that, by-and-large, the circulars make references to potential fixes of these bugs and errors. However, we have no way of confirming: (i) the timeliness of these circulars being



sent from when issues were identified; (ii) the extent to which all circulars were received and/or read by sub-postmasters; (iii) the ability of sub-postmasters to be able to implement suggested fixes of the bugs; and (iv) the extent to which PFD, Audit and Investigations functions were aware of these errors and bugs and its potential impact on regular reporting. The severity and impact of bugs and errors reported through Captivation and Focus varies in materiality, from a minor formatting inconvenience through to misrepresentation of entries.

Branch Files obtained by Kroll that were provided by Post Office Limited also make specific reference to sub-postmasters experiencing issues with Capture and raising the software as a potential cause during the investigations process, however there is limited information contained on file that suggests serious consideration was given to Capture software being the root cause of shortfalls and/or errors. As examples, a Retail Network Manager ("RNM") interviewed a sub-postmaster under caution (associated with an inflation of pension and allowance figures) in March 1996, where they noted the sub-postmaster "cannot work and did not understand Capture", and that their "problems began with Capture". The subpostmaster's partner was also the user of Capture in this specific example. In this instance, Post Office Limited opted not to secure the computer and Capture software for further review, and reinstated the subpostmaster with restrictions on their partner's activities in the branch. In a separate example, we had identified that in May 1996, the Investigations Department had sent a copy of a Capture C50 disk to the Capture development team for examination, who responded by saying there was a known fault associated with pension and allowances transactions, that a sub-postmaster claimed caused substantial losses. The Investigations Department concluded complaints associated with Capture were a "red herring", as the sub-postmaster "chose to falsify his accounts despite the fact that he was fully appreciative of the proper procedures he should have adopted". The sub-postmaster was terminated and recommended for prosecution, according to available records.

1.5 Examination of the Capture Software

The aim of this work was to examine the Capture software copy held by an investigator supporting subpostmasters to determine if and how that copy of the software identified shortfalls.

Our approach to examine the Capture software followed these steps:

- Obtain Capture software Kroll has identified 19 versions of Capture software released to users by Post Office Limited which are appended in section 11 (see section 7.1.2);
- Identify which reported Capture issues could be tested with the available software (section 7.1.3). Five potential software faults were selected for testing from the 46 Capture issues identified from a review of different newsletters and circulars. The selection was based on criteria including: i)



whether the available description of the issue suggested it could have created an incorrect weekly cash account; ii) whether the description of the issue suggested the cause was a software fault rather than other potential causes such as a faulty power supply; and iii) whether the relevant version of the software was available for testing (section 7.1.3).

- Prepare a testing environment on a virtual machine (a digitized version of a physical computer)
 with the same operating system (MS-DOS) installed in the testing environment in order to replicate the computers used by sub-postmasters to operate Capture originally (section 7.1.4);
- Create and follow a test script for each issue to be tested. The script specified a set of actions the
 tester would conduct on the Capture software installed in the testing environment, in an attempt
 to replicate the identified issue (section 7.1.5); and
- Identify how the Capture software stored data at each step in the test script. We observed that the Capture software stores the data it requires to operate in a number of different files. By observing the changes in these files at each step in the test script we were able to observe how the changes in data stored by the software relate to the software issue (section 7.1.6).

Out of five reported Capture issues examined, Kroll was able to replicate three of the issues within the limited time available for testing. The impact of the three issues would have resulted in variance between cash or stock on hand and the cash or stock balance in the summary reported in the software.

For two of the issues which we replicated in testing (test scenarios 1 and 5 in section 7.2), the reported Capture issue would result in inflated stock figures for certain categories of stock (such as National Insurance Stamps) to be recorded by the software, resulting in lower physical stock on hand when compared to the end of week Capture balance. Although, unlike scenario 2, scenarios 1 and 5 did not result in a "shortfall" figure in the Capture weekly closing process, we understand that this error could have resulted in a discrepancy (i.e. shortage) of physical stock on hand at the end of week.

For the third issue we replicated in testing test scenario 2 (section 7.2), the reported issue of a failure to include the Remittance Out data in the weekly cash account data was demonstrated to result in an incorrect shortfall which arose when the weekly close process was run after an upgrade from software version C25 to C35. The end of week balance showed a shortfall which was equal in value to the "Remittances Out", indicating that these transactions were not included in the software's calculation of the closing cash on hand. The issue was also shown in testing to persist in subsequent weeks following the upgrade of the Capture software from C25 to C35: Capture would generate incorrect shortfalls until the software was updated to fix the fault.



1.6 Conclusions

As stated above, Kroll was required to provide a conclusion based on the available evidence (if necessary, based on the balance of probabilities) as to whether there was a reasonable likelihood that Capture could have incorrectly created shortfalls for sub-postmasters, as claimed. We have not sought to opine on individual cases, but rather draw upon available evidence and determine whether it was possible Capture had the capacity to generate shortfalls. Given the numerous versions of Capture utilised over its period of activity, and the availability of those versions being incomplete, it was not possible to demonstrate each and every Capture version was capable of generating shortfalls to a forensic level during the course of this engagement.

In three of the five communicated Capture software issues, Kroll was able to replicate the described issue during testing, which would have resulted in variance between cash or stock on hand, and the cash or stock balance contained in the Capture summary. Despite various control functions being in place at Post Office Limited, including sample checks from Clients, PFD control checks, routine audits, the Capture helpline, circulars and newsletters, as well as the option to revert to manual processes, there is an acknowledgement both in internal and external communications during the 1990s that Capture had bugs and errors that varied in severity.

In addition to this, the burden placed upon sub-postmasters to implement fixes, which varied in complexity, together with a reliance on communications from Post Office Limited to identify these bugs and fixes, meant there was a high capacity for errors to go unnoticed. Whilst sub-postmasters were supposed to be advised they could revert to manual processes if they encountered issues with Capture, experiences gathered through witness testimony show the implementation of this practice was inconsistent, and in some cases sub-postmasters have stated they were deterred from reverting to the manual process.

Contextually, sub-postmasters were also bound by contracts that meant they were required to repatriate losses caused through "negligence, carelessness or error". Given this external pressure placed upon sub-postmasters, our review has found multiple methods used to repatriate losses, often driven by an inconsistent understanding of resources available to support in the event of errors. The actions, based on sub-postmasters' witness testimony, in certain cases, was claimed to have led to suspension, termination and prosecution based on theft and false accounting charges, as generally the understanding of contractual requirements was to reimburse (or "make good") any shortfalls that occurred. Kroll does not provide comment on whether any convictions arising from sub-postmasters using Capture could be considered unsafe.



Several sub-postmasters also commented that they reported issues with Capture to RNMs, these were not followed up by Post Office Limited or taken into account in audits and investigations. In some cases, these sub-postmasters were subsequently suspended and/or convicted. Knowledge of Capture bugs and related issues was not formally shared between the Capture development team and Post Office Limited control functions (for example legal, audit and investigations) Kroll has not identified evidence showing issues with the Capture software resulting from bugs were regularly taken into account by Post Office Limited's audit, investigation and legal teams when conducting their work, based on a review of available Branch Files and interviews with Current Employee 2. Given this, we consider that, based on available evidence, there was a reasonable likelihood that Capture could have created shortfalls for sub-postmasters.



2 Introduction & Methodology

This section provides an introduction to Kroll's engagement and scope of our investigation into Capture. Additional detail is set out in the sub-headings below as follows:

- Section 2.1 provides an introduction to our engagement and our Terms of Reference;
- Section 2.2 outlines the methodological approach we have taken, together with various sources
 of information we have been provided access and relied upon;
- Section 2.3 summarises the central allegations we have been asked to assess; and
- Section 2.4 outlines the limitations in our work based on the information available.
- Section 2.5 outlines the structure of our report.
- Section 2.6 summarises the terminology and acronyms used in the report.

2.1 Introduction

On 29 May 2024, Kroll Associates U.K. Limited ("Kroll", "We", "Us" or "Our") was engaged by the Department for Business and Trade ("DBT") to conduct an independent investigation into Capture ("Capture" or "Software"), an accounting software used by sub-postmasters² between 1992 and 1999 ("the Investigation").

In January 2024, allegations surfaced in the media that Capture could have caused shortfalls for sub-postmasters (see section 2.3). In April 2024, the former Post Office Minister (Minister Hollinrake) met with a former sub-postmaster and solicitor representing sub-postmasters who believe that they were wrongly accused of stealing and other offences as a result of their use of Capture.³ In the same month, the former Post Office Minister announced that an investigation should take place into the Capture software, which led to Kroll's appointment.

² Sub-postmasters managed Post Office branches under contract with Post Office Limited. They were self-employed business owners and not seen as employees of Post Office Limited. We have used sub-postmaster throughout the report if referring in general terms.

³ e.g. https://inews.co.uk/news/review-post-office-capture-horizon-scandal-3012380?srsltid=AfmBOor4 rEZjUpYTwr5Q6hXdtcWz6vyOcw3lucygsCTMNKlffO DFSq



Kroll's Terms of Reference were as follows:

- Gather and forensically examine all available evidence from former sub-postmasters⁴, their investigator and Post Office Limited relating to the operation of Capture. This should include testimony from sub-postmasters where possible;
- Examine the copy of the Capture software held by an investigator supporting sub-postmasters to establish whether, and if so how, the software identified shortfalls;
- Test the available evidence regarding how any issues associated with Capture were investigated and dealt with by Post Office Limited;
- Identify any suppliers involved in the provision and support of Capture and seek relevant evidence
 from them including access to their copies of Capture, awareness of bugs which could support
 the sub-postmasters claims and their involvement in supporting any Post Office Limited
 prosecutions; and
- Provide a conclusion based on the available evidence (or if necessary, based on the balance of probabilities) as to whether there was a reasonable likelihood that the software could have incorrectly created shortfalls for sub-postmasters as claimed.

The following item was removed from the scope of the Terms of Reference during the course of the engagement, on the basis of it being decided that DBT would seek legal advice on its conclusions following the provision of the Kroll report: "provide a conclusion based on the available evidence (if necessary, based on the balance of probabilities), as to whether any faults/issues identified by subpostmasters were properly investigated by Post Office Limited at the time and could reasonably lead to a conclusion that any convictions resulting from those investigations could have been unsafe".

2.2 Methodology

Given the time period that has lapsed since Capture's deployment by Post Office Limited in the 1990s and Kroll's engagement to investigate the software, it is important to highlight that much of the relevant data to the investigation is likely to have been lost or destroyed (for example due to the passage of time, system change, corporate restructure or a lack of adequate archiving procedures). In addition, a number of sub-postmasters who used the software have passed away in the intervening period and as such, family

⁴ Named as 'Postmaster 1', 'Postmaster 2', throughout our report, for ease of reference when referring to individual subpostmasters.



members, partners and/or representatives have kindly provided information on their behalf as part of the engagement.

Kroll was required to adhere to a number of data privacy restrictions, including restrictions on the sharing of data between different stakeholder groups during the course of the investigation. Please see section 9, which provides details of the Privacy Notice provided to Kroll by DBT for the engagement. In addition, Kroll's investigation had limited time to collect evidence: our conclusions are based on evidence made available to us during the period 29 May to 21 August 2024.

As a result, in order to develop an understanding of Capture, Kroll has sought to identify and collect relevant data from a variety of different and disparate sources and third parties. In order to collect documentation from these sources, Kroll set up a shared mailbox, accessible only by members of the engagement team, as well as a secure file transfer portal. Where appropriate, Kroll also physically collected certain documentation.

At the initial stage of the investigation, both DBT and Post Office Limited sent letters to known sub-postmasters who had used Capture inviting them to contact Kroll, as well as solicitors who were known or were likely to represent sub-postmasters who used Capture. In addition, Post Office Limited published notices on their website about the investigation.

The documentation and evidence we have relied upon to inform our findings is referenced throughout this report.

2.2.1 Post Office Limited

On 13 June 2024, DBT entered into a Data Sharing Agreement with Post Office Limited, to facilitate the provision of all relevant information Post Office Limited held concerning Capture to Kroll. At the outset of the investigation, Kroll met with members of Post Office Limited's Remediation Team, which had conducted a preliminary investigation into Capture. The Remediation Team provided their working papers and a summary of their findings on 17 and 18 June 2024. Documentation collated by the Remediation Team was derived from the following sources:

- Post Office Museum archives;
- Post Office Limited's physical archive facility ("Facility 1"), which stores current and historical paper archives. Kroll was given access to an inventory of records held at Facility 1, which comprised a summary of documentation held in boxes (as opposed to the raw document text).
 We understand that the facility holds 82,039 boxes, and 75,581 files in total;



- By using the inventory for Facility 1 as a guide to potential material of relevance to the investigation, Kroll was able to request that the contents of certain archive boxes be scanned, unless those archives had already been scanned, to a separate platform ("System 1") used and accessed by Post Office Limited. These documents were then shared with Kroll. Kroll ran a set of keyword searches across the inventory. Indexing in the Facility 1 inventory was not sophisticated, and the identification of likely responsive material was therefore made more challenging;
- Witness testimony provided to Post Office Limited by sub-postmasters prior to Kroll's appointment;
- Current employees of Post Office Limited who worked at the Post Office during the 1990s. This is covered in more detail in section 2.2.2:
- Documentation held by Post Office Limited's legal counsel, Peters & Peters LLP ("Peters & Peters"). This is covered in more detail in section 2.2.4.

During the course of the investigation, Post Office Limited also advised that Branch Files, being files that held information relating to the employment, performance, investigation and/or termination of subpostmasters, may be available in certain cases, but not for all sub-postmasters or branches. On 15 July 2024, Post Office Limited sent Kroll 20 sets of Branch Files based on what they had collated to date and deemed related to Capture. The files were noted by Post Office Limited as containing sensitive and/or privileged information however this was waived for the purposes of Kroll's investigation and to facilitate our subsequent review of them (see section 2.4 for further details) On 14 August 2024, Post Office Limited provided a further subset of Branch Files, based upon sub-postmasters or their relatives providing consent for Kroll to seek this data from Post Office Limited.

2.2.2 Current employees of Post Office Limited

Outside of the Remediation Team, Kroll held a series of fact-finding interviews with current employees of Post Office Limited who agreed to support the investigation. The individuals held roles relevant to the Terms of Reference, in that they held knowledge of the Capture software and the contextual environment of the organisation at the time. The current employees included the following:

- Current employee 1, an Auditor at Post Office Limited during the 1990s;
- Current employee 2, an Investigator at Post Office Limited during the 1990s;
- Current employee 3, a sub-postmaster during the 1990s;



• Current employee 4, a Retail Network Manager during the 1990s.

2.2.3 Former employees of Post Office Counters Limited (now known as Post Office Limited)

Two former employees came forward at the outset of the investigation ("Former employee 1" and "Former employee 2") who had also conducted preliminary investigations into Capture and its users. Both had worked in various roles across the Post Office's IT function (a distinct business unit known as POIT) during the relevant period. Kroll held an initial meeting with the former employees on 19 June 2024.

In addition, during the course of our research, Kroll has identified a number of former employees involved in the development and provision of Capture during the 1990s. Post Office Limited did not hold contact details for these employees on their systems. Kroll identified contact details for these individuals through information contained in the public domain and wrote to them to advise them of the investigation and requested their support. Kroll has held fact-finding interviews with two additional former employees ("Former employee 3" and "Former employee 4") following our research.

2.2.4 Peters & Peters LLP

Peters & Peters are Post Office Limited's external legal counsel and within the context of that role have, we understand, undertaken a process to identify and review potentially unsafe convictions by Post Office Limited, related to the Horizon IT scandal.

Kroll first met with Peters & Peters and Post Office Limited on 25 June 2024. They have access, both directly and indirectly, to a range of databases which hold electronic data containing many millions of documents on behalf of Post Office Limited and for the purposes of other actions currently being taken. Whilst this information has largely been gathered for other purposes, we believe it possible that these datasets may hold relevant information to our Terms of Reference. The datasets accessible by Peters & Peters include the following:

- Dataset 1⁵;
- Dataset 2⁶;
- Documentation gathered for the purposes of Bates and others v Post Office Ltd;

⁵ Anonymised in order to protect identity of third-party system.

⁶ Anonymised in order to protect identity of third-party system



- Dataset 3 we have been advised that the vast majority of this dataset relates to the period post-2011, and as such searches were not performed against it;
- Back-up tapes and servers identified from Chesterfield, Post Office Limited's former finance headquarters;
- Casework spreadsheets and summaries of documentation gathered by Peters & Peters focussed on criminal prosecutions sought by Post Office Limited since the mid-1980s.

Information associated with this documentation is outlined in section 2.4.

2.2.5 Sub-postmasters

Prior to Kroll's engagement, a number of sub-postmasters and/or their families had raised concerns about Capture and their experience to two sources. In addition, sub-postmasters proactively contacted Kroll direct, via a shared mailbox advertised upon our appointment. It should be noted that sub-postmasters were not exclusive to these groupings, and some formed part of both. The two sources are as follows:

- Neil Hudgell Limited, a law firm ("Hudgells"). DBT entered into a Data Sharing Agreement with Hudgells on 21 June 2024. The firm represents a group of sub-postmasters who identified as Capture users. Via Hudgells, Kroll sent an introductory letter to sub-postmasters on 25 June 2024, at which point sub-postmasters who wished to support the investigation and share their experiences were instructed to contact Kroll;
- A former Member of Parliament ("Individual 1"). Individual 1 had previously been dealing with concerns raised to him by sub-postmasters. An introductory meeting was held with a former staff member of Individual 1 on 28 June 2024, with an introductory letter sent to sub-postmasters on 10 July 2024. sub-postmasters part of Individual 1's grouping was also all referred to Hudgells prior to Kroll's appointment.

Kroll met with 21 sub-postmasters, who have shared their experiences of using Capture. One further sub-postmaster provided details of their experiences over email. Fact finding interviews have been conducted both in-person and virtually over Microsoft Teams. Where sub-postmasters have held relevant documentation and data, we have sought to collect documentation securely.

During the course of our engagement, we have been provided with historic electronic data associated with Capture, including:



- 16 floppy disks containing various Capture versions and 'installer' files, provided by a family member of Postmaster 2 (deceased) (covered in greater detail in section 7). On receipt of these disks, Kroll took an image (exact electronic copy) of these disks.
- 13 files containing floppy images (.vfd format) which following inspection by Kroll appear to be Capture software installation or version update files. These 13 files were provided by Postmaster 4.
- 222 floppy disks containing copies of database files from the Capture software understood to have been used by Postmaster 14 between 1995 and 1999. It should be noted that the floppy disks are not accompanied by physical cash book records. Kroll has taken images of these disks.
- Prior to receiving the 222 floppy disks above, we were also provided with a number of electronic files, provided by Former employee 2. Postmaster 14 confirmed that the files were extracted from 15 of the 222 floppy disks. Kroll does not know who conducted the work to extract the files from the floppy disks. Kroll conducted a preliminary scoping exercise, to understand what analysis may be conducted on these files (Please see section 7.1.6).

2.2.6 Other relevant sources

During the course of our investigation, Kroll has spoken with three journalists who have published stories on Capture during 2024. The purpose of the discussions was to understand their knowledge base, as well as an avenue to facilitate introductions to other individuals who may be willing to support Kroll in the investigation. The discussions were conducted on a confidential basis.

In addition, Kroll met with a legal representative of Royal Mail, a former connected company to Post Office Limited, on 10 July 2024. The objective of the meeting was to understand whether, since their separation from Post Office Limited in 2012, they held relevant data to our investigation, including a defined list of sub-postmasters from the 1990s (see section 2.4.1). Royal Mail have advised that they have been unable to locate any relevant data.

We thank all sources for their cooperation during the investigation.

2.3 Allegations

Allegations began surfacing more prominently in the public domain surrounding Capture following the release of the *Mr Bates v The Post Office* TV drama, first aired on 1 January 2024.



On 17 January 2024, a national media publication published the first in a series of stories surrounding Capture.⁷ Broadly, the reporting raised concerns that, like Horizon, the Capture software was capable of generating shortfalls, and that there were known errors and bugs in the software according to contemporaneous documentation, including news circulars and updates to sub-postmasters. Several other national and industry media publications followed up with similar stories surrounding Capture.

2.3.1 Allegation 1 – demonstrable evidence of shortfalls generated in Capture

In April 2024, it was first reported that a set of floppy disks containing the Capture software had been identified, and it was first claimed that testing had been undertaken to demonstrate that faults with the software could have led to shortfalls being created in error.⁸

In early June 2024 following our appointment, Kroll was provided an initial introduction to the work conducted by Post Office Limited. This introduction included images from testing⁹ that, after further enquiries were carried out, we understand had been undertaken by an individual who tested the Capture software ("Individual 2"). Kroll met with Individual 2 on 16 July 2024. ¹⁰ Individual 2 has a background in IT and prepared a presentation outlining the testing that had been completed.

Individual 2 based their testing on a note by Post Office Limited sent to Capture Users that 'Remittances Out' (payments made to other offices) recorded on the Thursday, Friday or Saturday before the Capture user upgraded the software from version C25 to version C35 would not be transferred across to the cash account at the end of the week¹¹. The testing undertaken by Individual 2 conducted the following actions in the Capture software:

- On Day 1 (Thursday 6 August 1992), £1,000 in 'remittances in' were added as £1000, with a corresponding entry of £1,000 in 'cash on hand'. A Business Giro Deposit was entered of £5,000 and the cash on hand updated to £6,000. The closing balance of Day 1 was £6,000.
- On Day 2 (Friday 7 August 1992), £1,500 in 'remittances out' were added, with cash on hand also decreasing to reflect a closing balance of £4,500. The update of C35 was then implemented.
- On Day 3 (Saturday 8 August 1992). The active version of the software was now C35. No further transactions were added, and the end of week processing was ran. The 'cash on hand' was

⁷ https://inews.co.uk/news/claims-new-post-office-scandal-more-sub-postmasters-convicted-2856136?ico=in-line link

⁸ https://inews.co.uk/news/definitive-proof-of-second-post-office-it-scandal-found-in-30-year-old-floppy-disks-2998256

⁹ Post Office Limited did not have formal confirmation of who had conducted the testing.

¹⁰ It had been established during the intervening period that Individual 2, and not Former employee 1, had ran the testing on Capture.

¹¹ Capture C35 upgrade disk software faults.



amended to £4,500 to reflect the cash on hand prior to the end of week processing. This left a shortfall of £1,500, which was incorrect as the data on the remittance out of £1,500 from the previous week was not included in Capture's calculations.

This allegation, and more broadly whether bugs and/or known defects could have caused shortfalls to be generated, has formed the basis of our review.

2.3.2 Allegation 2 – issues with power supply

Upon Kroll's appointment, we were provided with a report produced by Former employee 1, which highlighted that power cuts and/or issues with power supply may have caused the corruption of data within Capture, and therefore generated shortfalls.

Whilst Kroll has been unable to test specific issues related to power supply and its impact on Capture (see section 7.1.3), we have been able to review documentary evidence surrounding this allegation and gather testimony from Former employees 3 and 4, who were involved in the management and testing of Capture, respectively.

We note at the outset that, given Capture was initially offered alongside a Compaq computer and printer, there was limited testing undertaken across other devices, and therefore the impact of Capture usage across other computers was unknown to Post Office Limited or POIT.

2.4 Limitations

As set out in section 2.1, DBT held no relevant documentation or data to the engagement and, given the time period that has lapsed since Capture was in use, substantive amounts are likely to have been deleted or lost. As a result, Kroll has been seeking to gather a potentially unknown and unquantifiable dataset of relevant information related to Capture. During the period of our investigation (29 May – 21 August 2024), we have sought to gather relevant information.

The key limitations are set out in the following sections.

2.4.1 Post Office Limited - no defined sub-postmaster or Capture user population

To gain a view of the sub-postmaster population during the period when Capture was in use, we obtained from Post Office Limited on 14 August 2024 a list of sub-postmasters who were active at July 1999.¹²

¹² Pre 2000 PMR List.xlsx



The list was based on data from the Post Office Limited's human resources system used to pay remuneration during the period July 1999 to February 2018. The list identifies sub-postmasters and other information including address but does not identify if they were Capture users. We understand that the list does not include all sub-postmasters for the period that Capture was in use, given that many sub-postmasters would have ceased being active by July 1999. In addition, we understand there may be duplicated entries owing to data quality issues. We have not been able to obtain a list of active sub-postmasters covering the period of the 1990s, or a list that indicates if a sub-postmaster was a Capture user.

We have also appended in Section 10 estimates of the Capture user population at different dates in the 1990s, gathered from documentary evidence.

Given there is no list of Capture users available, we have been unable to reach out to all individuals known to have used Capture, beyond those who have proactively contacted Kroll.

2.4.2 Post Office Limited - lack of contact details held for former employees

Through a review of historic documents, Kroll identified a number of individuals who were involved in the development, roll-out and maintenance of Capture, and as a consequence sought to obtain their contact details to request support in our investigation. Enquiries with Post Office Limited's Human Resources department found that they no longer held contact details for any of the subjects requested, due to the time that had lapsed since their employment.

Where possible, Kroll has sought to contact these individuals through our independent research of publicly available sources of information, or through introductions via other interviewees.

2.4.3 Post Office Limited / Peters & Peters LLP – data protection concerns

During the course of discussions with Post Office Limited and Peters & Peters, it became apparent there were concerns about Kroll accessing the various databases accessible by Peters & Peters, given the databases had disproportionately been gathered to focus on Horizon and the associated actions. Both Post Office Limited and Peters & Peters relayed concerns as to whether providing Kroll with unrestricted access to these databases could give rise to risks associated with breaches of the Data Protection Act, given that they contain significant amounts of sensitive personal data likely not relevant to Kroll's Terms of Reference (see section 2.4.6 for further details of data protection work taken during the course of the investigation). It is also likely that certain datasets are covered by litigation privilege, given it is held in relation to ongoing and potential litigation and/or disputes unrelated to our scope.



In late July 2024, it was resolved that Kroll would provide Peters & Peters with sets of key words relevant to Capture to run across the databases, and that they would then in turn provide 'search term reports' which summarised the frequency and quality of results, as set forth below.

2.4.4 Post Office Limited / Peters & Peters LLP – access to review platform

On 1 August 2024, Kroll received the first 'search term report' from Post Office Limited and Peters & Peters, in respect of generic Capture terms. Kroll contained our searches to date ranges from 1991 to 2006, a time period agreed based upon the operating period of Capture (1992 to 1999) as well as the availability of data through Peters & Peters. A summary of the resultant documents with hits are set out below, which indicated that there are at least 178,709 hits for generic Capture terms.¹³

TABLE 1 Search Term Report, 1 August 2024

Dataset	Number of documents with hits	Number of documents with hits + families
Dataset 1	60,482	969,728
Dataset 2	14,814	277,980
Group Litigation (Bates and others v Post Office)	12,913	280,418
Back-up tapes	90,500	231,801
TOTAL	178,709	1,759,927

In addition, Kroll sought the consent of sub-postmasters that had been interviewed, in order to run searches across datasets accessible by Peters & Peters. The objective was to identify further information specific to their own individual experiences of Capture, as well as what electronic data may have been held on these files. 16 sub-postmasters provided consent for search terms to be run over their names and certain identifiable branch details. We shared the search terms for these subjects on 7 August 2024, and we were provided with a search term report on 19 August 2024, the summary results of which are included below.

TABLE 2 Search Term Report, 19 August 2024

Dataset	Number of documents with hits	Number of documents with hits + families
Dataset 1	7,839	244,663
Dataset 2	5,498	91,857

¹³ Kroll removed two individual terms from the search term owing to a disproportionate set of results. This decreased the documents with hits from 268,968 to the current amount, and documents with hits + families from 2.5 million to the current amount.



Dataset	Number of documents with hits	Number of documents with hits + families
Group Litigation (Bates and others v Post Office)	1,442	55,156
Back-up tapes	7,923	28,325
TOTAL	22,702	420,001

We were informed that the results of the searches set out above reflect the sum of documents with hits across each individual dataset. This means that there are likely duplicate documents counted across the various datasets.

On 21 August 2024, Kroll was provided with access to an e-discovery platform managed by KPMG (and accessible by Peters & Peters and Post Office Limited) to review available documentation. Given the time-limited nature of our investigation (see section 2.4.5), which meant we had to prioritise the collection and analysis of multiple sources of data and evidence, this documentation has not formed part of the report.

2.4.5 General – period of Kroll's engagement

Kroll was engaged by DBT on 29 May 2024, with a contract expiry date of 11 September 2024. A draft report was provided to DBT on 21 August 2024. As such, the nature of our engagement has been time limited. Any representations around the report, including individuals who are able to comment further on the Terms of Reference beyond the contracted period should contact DBT on Capture@businessandtrade.gov.uk.

2.4.6 General – Data Sharing Agreements

During the course of the engagement, it became apparent that Kroll was not able to share details of sub-postmasters that had made contact with Kroll with other sources of information gathered during the course of the investigation (for example, datasets accessible by Peters & Peters), for the purposes of corroboration or informing findings, given the structure of the Data Sharing Agreements entered into by DBT with Post Office Limited. This meant that searches of certain datasets, specifically those held by Post Office Limited and Peters & Peters, were only searchable via generic terms that did not contain personal data.

Once this issue was identified, in order to reduce the restrictions on evidence collected in the investigation, DBT sought to negotiate addendums to Data Sharing Agreements with Post Office Limited, which was subsequently agreed on 24 July 2024. Following this, Kroll sought to obtain consent from subpostmasters who had previously been interviewed by Kroll, in order to run terms, such as their names, branch addresses or unique identifiable codes associated with their branch, across the applicable datasets.



2.4.7 General - reliance on witness testimony

Given the lack of documentary evidence immediately available relevant to the Investigation, Kroll has relied in certain instances upon testimony provided by relevant individuals who supported the investigation. Whilst we have sought to corroborate findings with other sources of information, such as other interviewees or documentary evidence, this has not always been possible. In addition, a number of sub-postmasters have since passed away prior to Kroll's appointment, and as such, family representatives and others have been in contact with Kroll to relay their experiences second-hand. Whilst this information was helpful in understanding the contextual environment in which the sub-postmasters operated, it is acknowledged that it cannot be considered primary testimony.

In addition, given the time that has elapsed since the roll-out of Capture, recollections from interviewees can vary in accuracy. As an example, three interviewees that came forward to Kroll were found, based on their own disclosures and further documentary evidence gathered, to have not been Capture users, and to (in certain cases) have been referring to the Horizon system, which did not form part of this review. Findings referenced in this report, to the extent that we are able, are corroborated from multiple sources.

2.4.8 General – lack of clarity on chain of custody of Capture software disks

We understand that prior to our appointment, the disks containing copies of the Capture software (specifically the 16 floppy disks containing versions of Capture obtained from Postmaster 4) were shared amongst various interested parties. As a result, there is a lack of visibility as to their evidential veracity and any data they contained; we cannot provide forensic assurance that the data was not compromised. This has been acknowledged by DBT.

By way of example, we understand that floppy disks were shared with a journalist and subsequently returned to various parties. A relative of Postmaster 2 (deceased), who originally held a floppy disk of Capture software version C25, did not have this disk returned and its whereabouts is currently unknown. An image of this data was previously taken by Individual 2, which is the version we have used in our testing.

Kroll acknowledges that although the data and software cannot be verified, we have not identified any indications that the applications or programmes shared with us have been modified.



2.5 Structure of the report

The report is structured based upon the sources of evidence available to Kroll. Sections are generally structured with an 'approach' and 'observations' sub-sections. A summary of the various sections is included below:

- Section 3 provides a contextual background to the operations of the Post Office in the 1990s and an overview of the roll-out and functionality of Capture;
- Section 4 provides an overview of the control environment at the Post Office, including the audit and investigations processes and Kroll's observations;
- Section 5 outlines Kroll's approach to obtaining witness testimony around sub-postmasters' experiences using the Capture system, as well as our observations of key themes brought forward during interviews;
- Section 6 provides an overview of the documentary evidence Kroll has been able to access
 during the investigation, including how this documentation evidence, substantiates or
 contextualizes witness testimony provided by sub-postmasters;
- Section 7 contains Kroll's approach to the forensic testing of Capture software available, and the results of the testing;
- Section 8 provides our conclusions on our Terms of Reference.

2.6 Terminology

The following acronyms are used across the report. Upon first reference, we have provided further details on their meaning and relevance.

TABLE 3 Acronyms used for report

Trible 3 Treferry in a document to port	
Acronym	Meaning
AM	Area Manager
ATM	Automated Teller Machine
Bol	Bank of Ireland
CPOs	Crown Post Offices
DBT	Department of Business and Trade
DSS	Department of Social Security



Acronym	Meaning
MVL	Motor Vehicle Licenses
PACE	Police and Criminal Evidence Act
PFD	Post Office Limited Finance Department
POCL	Post Office Counters Limited
POIT	Post Office IT
POS	Point of Sale
QPA	Quality of Performance for Agencies
RNM	Retail Network Manager



3 The Capture Accounting System

This section provides contextual background to the operations of the Post Office in the 1990s and an overview of the rollout and functionality of the Capture software. Additional detail is set out in the subheadings below as follows:

- Section 3.1 provides a background to the operations of Post Office branches in the 1990s;
- Section 3.2 explains the weekly reconciliation process;
- Section 3.3 describes the rollout of Capture;
- Section 3.4 describes the purpose and functionality of Capture; and
- Section 3.5 details Kroll's findings in relation to external suppliers referenced in relation to Capture.

3.1 Background – the operation of the Post Office in the 1990s

In the early 1990s, at around the time when Capture was being developed and implemented, the Post Office was split into 4 different businesses: Royal Mail, Parcel Force, Post Office Counters Limited ("POCL") and Post Office IT ("POIT"). Based on publicly available data, the number of post offices gradually declined during the 1990s, from 20,871 in 1990 to 18,393 in 2000 (an 11.8 percent drop).¹⁴

Post office branches comprised of two main types: directly managed branches (which were also referred to as "Crown Post Offices" or "CPOs" which were branches directly managed by Post Office Limited); and "Agency Branches" which were managed independently by sub-postmasters. Based on publicly available data, the number of post offices gradually declined during the 1990s, from 20,871 in 1990 to 18,393 in 2000 (an 11.8 percent drop).

Both the Crown Post Offices and the Agency Branches conducted a variety of different transactions in the ordinary course of their business alongside Post Office transactions (posting of letters and the sale of postage stamps, for example). These types of transactions comprised mainly cash related transactions including payment of pensions or benefits, processing of various licenses on behalf of the UK government

 $^{{}^{14} \}quad \underline{\text{https://researchbriefings.files.parliament.uk/documents/SN02585/CBP02585-data-file-for-publication.xlsx}$

¹⁵ We understand Agency Branches to include sub-post offices, standard post offices, community offices, scale payments sub-offices, franchise sub-offices, and rural sub-offices.



and associated authorities (for example, vehicle licenses, fishing licenses, dog licenses), and electronic GIRO transfers which were conducted on behalf of other entities or departments, referred to as Post Office Limited "Clients". There were approximately 150¹⁶ different types of transactions that were processed by branches.

All stock (e.g. stamps) and any cash held by Post Office branches to make these payments belonged to Post Office Limited, and these transactions gave rise to various remittances and reconciliation items between the branches and the Post Office Limited Head Office. As necessary, Post Office Limited would deliver cash to the branches (for example just before pension and/or benefits payments were due to take place). If too much cash was held at a branch, the branch would send back the excess to Post Office Limited.

3.2 The weekly reconciliation process

The weekly reconciliation process was explained during interviews.¹⁷ Post Office Limited Finance Department ("PFD") kept its own accounting records and maintained a large finance data entry and processing system, located in Chesterfield.

Each branch would operate its own standalone accounts for transactions conducted and cash on hand; these were generally kept manually (i.e. in physical ledger books that were completed per transaction).

The accounts kept by sub-postmasters had to be reconciled to Post Office Limited's accounts, and this was conducted on a weekly basis. Each week in the year was allocated a number, and weeks closed on a Wednesday evening. Once a sub-postmaster had closed off their weekly accounts, they would send out two different pieces of information:

- A weekly cash account, which summarised in aggregate the transactions and resulting stock and
 cash on hand at the end of the respective week, to Post Office Limited's main accounting
 processing centre in Chesterfield (PFD, which was entered into Post Office Limited's overall
 mainframe accounting system), and;
- Voucher bundles for each different type of transaction (for example, the bundle of pension payments made) would be sent to the respective Clients (for example, the then Department of Social Security ("DSS"), in the case of pensions). The Clients would sample check the bundles

¹⁶ Former Employee 3 quoted 158 types of transactions: Current Employee 2 cited 147 types of transactions.

 $^{^{17}}$ Primarily from interviews with Employee 1 and Employee 2. Our understanding of the process was also corroborated in interviews with various sub-postmasters.

¹⁸ Closing was moved to a Wednesday evening from a Friday evening. Interviews indicated that a Wednesday evening closure was in place by the early 1990s.



received from the branches and provide a summary report, including any errors identified, to Post Office Limited's finance department.

PFD conducted data entry and control tests on the information sent to them by the sup-postmasters on a weekly basis, before this was entered into the Post Office Limited accounting system.

A reconciliation of the two sets of information, in addition to the control checks described above, would take place within the PFD. Discrepancies could arise in a number of different ways, for example errors, timing differences, or incomplete bundles being sent. If discrepancies were identified, these would be corrected within Post Office Limited's accounting system by issuing an error notice to the relevant branch. These error notices — which could take up to six to eight weeks to arrive at the related branch — would then be applied to the stock and cash balance on hand in order to correct any errors or timing differences. In the case of branches using Capture, any error notices received would be applied against the values produced by the weekly cash summary printout from Capture, thereby correcting shortages or surpluses.

3.3 The rollout of Capture

According to several interview sources, the roll-out of Capture was not a centrally strategic project of Post Office Limited during this period. Kroll has reviewed the Capture Business Case which was a Post Office Limited internal document produced in April 1992 that recommended implementation of Capture should be formally approved by Post Office Limited. This document set out that Post Office Limited developed Capture as a "Post Office Limited Official" version of two similar pieces of software which were in use by sub-postmasters at the same time. Both Capture and the similar pieces of software assisted sub-postmasters in automating the processing and production of the weekly cash account and client summaries, thereby reducing errors and reducing the time spent by sub-postmasters on these tasks (approximately 18,000 branches produced weekly cash accounts). PO Balance had been developed by a sub-postmaster and was in use by around 800 branches, whilst Geotech²¹, a software provider external to Post Office Limited, had developed Sub Office Software. Sales of both PO Balance and Sub Office Software indicated to Post Office Limited that there was a market for such software. This was also confirmed by external market research commissioned by Post Office Limited which indicated that 84% of agency branches were interested. One source, Postmaster 14, told us that they elected to use Capture, rather than the PO Balance software, as it was the Post Office Limited endorsed software. Based

¹⁹ Capture Business Case, page 185.

²⁰ According to the Capture Business Case (April 1992), around 800 branches were using PO Balance. (Capture Business Case, page 131). Unlike Capture printouts, PO Balance printouts were not accepted by Chesterfield, and had to be manually transcribed into a template form.

²¹Post Office Limited internal documentation and media reporting refer to the company as "Geotech".

²² Capture Business Case, page 131.

²³ Capture Business Case, page 115.



on interviews, we understand that Capture was rolled out to agency branches but was not in use by CPOs. The Capture Business Case forecast 2,500 sales of Capture between 1992 to 1997.²⁴

Capture was written in Clipper²⁵ and developed in-house at Post Office Limited by POIT from approximately October 1991.²⁶ Kroll interviewed one former Post Office Limited employee who was involved in the project management and roll out of Capture. However, we were not able to identify anyone involved in the development of Capture. A pilot implementation phase was rolled out and final testing took place between January to March 1992²⁷. The software was launched in the summer of 1992²⁸ to a group of sub-postmasters in Liverpool and Kent. We received supplementary testimony that Postmaster 18, in the Surrey area, was also asked to be part of a trial of Capture in 1993, although this could not be corroborated with documentary evidence. The purpose and functionality of Capture is set out in more detail in section 3.4.

Former Employee 4 described the testing of the software for the first and subsequent releases. The testing of new versions of the software took approximately two weeks. This activity included the drafting of the test scripts used by the testers to examine the changes in the software, working through the test scripts and running regression tests (testing of the software to check the new features of the software do not impact existing functionality). The Capture software also had different versions for London offices and Provincial (i.e. outside of London) offices, and the testing would be tailored to each of these different versions. Once the testing was completed, a report on the testing was produced by the test team which was considered by the Capture business manager who then made the decision to sign off the testing (or not). See also section 5.2.5 regarding Capture testing in relation to the hardware requirements of the software.

Sub-postmasters were offered Capture through Post Office Limited's Retail Network Managers ("RNMs"), however the purchase and implementation of Capture was not generally considered mandatory, though there is evidence from 1995 and 1996 of the purchase of Capture being a condition of contract for some sub-postmasters (section 6.2.4)²⁹ ³⁰. RNMs were Post Office Limited employees responsible for overseeing several different branches within a certain regional area. RNMs conducted

²⁴ Capture Business Case, page 127.

²⁵ Clipper is a programming language preprocessor and code generator for the xBase programming language which was used for Microsoft DOS and was in use during the 1980s and 1990s. It was developed by Nantucket Corporation.

²⁶ Capture Business Plan page 157.

²⁷ Capture Business Plan page 167 and page 133.

²⁸ Capture Business plan page 219 – brochure sent by 25 May.

²⁹ Capture was not mandatory, according to Post Office Limited notes prepared for inclusion in the August 1992 edition of the "Subpostmaster" circular, which was one of a number of publications circulated to sub-postmasters (Capture Business Plan page 85).

³⁰ We have seen indications of sub-postmasters being required to use a financial management system such as Capture "to ensure quality and accuracy of accounts", as of 1995. See Postmaster 3 Branch File, page 357.



various road shows to introduce Capture to sub-postmasters, and several interviewees told us they were introduced to Capture by their RNMs.

Sub-postmasters were provided with the software on a floppy disk, which we understand was normally sent along with a Post Office Limited-provided desktop computer (although some sub-postmasters indicated that they purchased their own device to run the software on). According to documentation from 1992 reviewed by Kroll, there were three types of Capture packages that were offered to sub-postmasters:³¹

- Sub-postmasters were offered a complete package (including Post Office Limited provided computer and monitor (Compaq), keyboard and printer and the software) for a total of £1,250;
- Sub-postmasters had the option of purchasing the software alone for £250; or,
- Sub-postmasters could purchase the software plus a printer for £400.

All packages were inclusive of training and software updates (forecast to be released yearly, according to Former Employee 3), as well as access to the helpdesk support.

We understand that a second version of Capture (Capture II) was developed with Unisys, an external supplier, ³² and sent out for release in August 1995 to a number of trial offices that were authorized to provide motor vehicle licenses ("MVL") (referred to as Capture MVL offices in the September 1995 Focus newsletter). According to documents, Capture II was a complete re-write of the Capture software, which sought to replicate the existing Capture software, but included improvements to layout and took into account user feedback from a focus group of users. However, the rollout of Capture II was subsequently called off due to "serious problems – which did not appear during either the acceptance testing or trial stages of the development" referred to in a Focus newsletter from September 1995. This document refers all Capture II users to revert to Capture C50, which was the latest version of Capture in issue at the time. We have not identified any evidence to suggest that Capture II was ever fully rolled out after the initial testing, and the documentary evidence from Post Office Limited circulars at the time continued to reference subsequent versions of the original Capture software.

³¹ Capture Order Form (Capture Business Plan 1992 page 309).

³²From interview testimony we understand that an external supplier (Unisys) was involved in the development of Capture II, although the extent of their involvement is not clear. Interview testimony suggested that their involvement was limited. A Focus newsletter dated September 1995 references Unisys' involvement in resolving issues related to Capture II software.

³³During the review period there were several different newsletters and circulars that were issued to Post Office branches on a regular basis, including Focus, Captivation, The Subpostmaster, Counter Courier and Counter News. These circulars occasionally contained details of the Capture software (including issues with Capture, and recommended fixes).



Several versions of Capture were rolled out between 1992 and March 1999, the final date of release identified by Kroll. Capture was superseded by the launch of Horizon during 1999. Generally, a new version was released every six months. Kroll has identified 19 versions of Capture software released to users by Post Office Limited which are appended in section 11.

It is not clear how many sub-postmasters used Capture as Kroll has not been able to identify a list of all branches that implemented Capture over the period. Documents reviewed by Kroll indicate that by February 1994, there were 1,400 Capture users. According to a Post Office Limited Investigation, a total of 2,500 floppy disks with the C90 upgrade were made in March 1998. This figure is the same as the total number of forecast sales in the Capture Business Case referred to above, and it is therefore assumed that the total number of users was up to 2,500 at this point, however it is likely that additional/redundant copies could have been made to meet the expected demand of 2,500. This would constitute up to 13.6 percent of Agency Branches for 1998. It should also be considered that Capture disks could have been shared between sub-postmasters, increasing the number of potential users.

A number of different data points provided further insight into the use and adoption of Capture, which are set out in section 9. Interviews with current and former Post Office Limited employees indicated that while some branches used Capture, most branches were still using manual ledgers during the 1990s, although this could not be further substantiated.

3.4 Purpose and functionality

Post Office Limited's business case document³⁴ stated that the aim of introducing Capture was to help sub-postmasters to balance their cash account more cost effectively and efficiently, by reducing the number of manual entries and calculations that had to be processed by sub-postmasters to arrive at the weekly cash summary sheet described in the weekly reconciliation process (section 3.2). The software's objectives as described by Post Office Limited in its marketing material included "Is easy to use for those Sub-postmasters without computer experience" The Capture software was in essence a back-office processing software. Its functionality has been described as similar to an Excel spreadsheet.

Sub-postmasters who employed the Capture software would input cash and stock into the software rather than onto a manual ledger, and the software automatically aggregated the figures and transferred the daily totals onto the correct part of the weekly balance sheets. Not every transaction was entered into the software. The weekly cash balance would then be aggregated, and the sub-postmaster was able to print out a summary which was then sent to PFD, as described in section 3.2.

³⁴ Capture Business Plan p 87.

³⁵ Capture Business Plan, p 5



The Capture software comprised only one element of the overall accounting process in place at Post Office Limited at the time and did not interface with any point of sale ("POS") systems used by sub-postmasters or with Post Office Limited's own accounting system. The Capture software was wholly a tool to assist with certain parts of the back-office accounting process.

3.5 Suppliers

We have identified references to several parties external to Post Office Limited during the period of Capture's rollout and implementation. However, we have not identified any evidence to suggest that these suppliers were involved in developing the software. Rather, they were focused on the provision and maintenance of hardware or other software in use at the time.

- Systemhouse International (Europe) Limited ("Systemhouse"): According to the Capture Business Plan,³⁶ Systemhouse distributed the Compaq hardware. This document indicates that Systemhouse was also responsible for hardware maintenance³⁷ and was the service and maintenance provider for Post Office Limited supplied hardware for Capture.³⁸ We did not identify any evidence to suggest that Systemhouse was involved in the development of Capture software. Systemhouse was dissolved in March 2014.³⁹
- Unisys: Appears to have provided printers and keyboards to users that purchased Capture software from mid-1996.⁴⁰ Unisys also provided a hardware maintenance contract from some point prior to July 1998.⁴¹ There is also reference to Unisys' involvement in the development of Capture II (see section 3.3).
- Unisys was also involved in the development of the ECCO+ software which was developed in 1990 and was being used by Crown Post Offices⁴² and some agency branches. ECCO+ was initially a front of house (i.e. point of sale or "POS") software based on a local area network which allowed the sub-postmaster to complete transactions and input data which would be printed in a weekly cash account. The system was later further developed and automated to allow for semi-

³⁶ Capture Business Plan, p 91.

³⁷ At the time of this report, Systemhouse had been established for 8 years and had more than 120 field engineers nationwide (Capture Business Plan, page 257).

³⁸ In the case of a hardware related call received by the Helpdesk, the call would be redirected to Systemhouse if required (Capture Business Plan, page 281).

³⁹ https://find-and-update.company-information.service.gov.uk/company/01753173

⁴⁰ Focus newsletter published June 1996 indicates that Unisys provided printers and keyboards to Capture users (Capture newsletters v02 of 20240504).

⁴¹ Focus newsletter dated July 1998 indicates that Unisys have now taken over the hardware maintenance contract from SystemHouse.

⁴² According to Post Office Limited, there were 650 Crown Post Offices in June 1993.



online benefits payments via magnetic cards. 43 Kroll has not approached Unisys for the purposes of this investigation. However, Unisys was previously approached by Post Office Limited and journalists looking into the matter, and Unisys confirmed to them that no relevant data was available. 44

Wincor Nixdorf: According to Post Office Limited, Wincor Nixdorf was responsible for hardware
and software for Post Office Limited's ATM machines, supplied through Bank of Ireland ("Bol").
 Information reviewed by Post Office Limited states that the contract for this service was between
Post Office Limited and Bol and we have not seen any evidence to suggest that Nixdorf had any
involvement in the development or rollout of Capture.

⁴³ Interview with Former Employee 3, a Project Manager on Capture.

 $^{^{44}\,}https://www.computerweekly.com/news/366581519/Unisys-reveals-no-link-to-development-of-controversial-Post-Office-software$



4 Capture: The Post Office Control Environment

This section provides an overview of the control environment at the Post Office, including the audit and investigations processes and Kroll's observations. Kroll has observed that potential issues resulting from Capture errors did not appear to form a key part of these control functions in relation to the investigative steps undertaken for shortfalls, as set out in further detail in section 4.2.

4.1 Approach

Kroll's understanding of the audit and investigations process conducted by Post Office Limited employees on branches was based primarily on interviews with Employee 1 and Employee 2, who acted as auditors and investigators at Post Office Limited during the 1990s, and is set out below:

4.1.1 Audits

We understand that Post Office Limited audit teams conducted regular audits on sub-postmaster branches throughout the review period. Based on interviews with Post Office Limited employees, the Post Office Limited audit department was structured in four or five regions, including Scotland and Northern Ireland. Each region had an audit operations manager, who was responsible for overseeing all audits within the region, and a number of audit staff who led or assisted on the audits.⁴⁵

Audits were conducted with reference to a standard list of audit procedures, which covered both financial testing (most importantly the balance of cash on hand), and "compliance" testing. Financial testing included testing of the cash and stock on hand, whilst compliance testing sought to determine whether the branch was being managed in line with Post Office Limited policy (for example, security procedures).

We understand that Post Office Limited audit teams were provided with the selection of branches for testing by their regional audit managers. Audits generally took one day, unless issues were identified, in which case the auditors had to return the following day. According to interview testimony, Post Office Limited sought to audit each branch on a regular basis (between 18 months and 39 months).46 Branches could also be selected for audit as a result of a number of different situations, for example, following the identification of large discrepancies, in the event of a burglary, at the request of an investigator, RNM or

⁴⁵ The audit and investigations process were described by two interviewees.

⁴⁶ 18 months and 39 months from two different interview sources.



sub-postmaster, or if there were a disproportionate number of errors identified in the cash statements provided to PFD.⁴⁷

Audits were conducted with reference to a standard list of procedures, regardless of which systems/processes were used by the branch (this could be manual ledgers, PO Balance or Capture). According to Kroll's interview with one former auditor, most branches were still using manual records during the 1990s.

In preparation for an audit, the audit team would obtain the branch name, code, location, size and any available transaction details. A questionnaire for compliance testing was also prepared. As part of the preparation, the audit team would request any error notices applied to the branch from PFD in Chesterfield. On the day of the audit, the audit team would obtain the latest available cash statement, and any transactions carried forward from that point, and seek to reconcile this with the cash and stock on hand. As part of their audit work, the audit team also considered the previous six weeks of transactions.

Following the completion of the audit work, the auditors would inform the sub-postmaster of the results of the audit in a closing meeting, where any actions to be implemented were also discussed. Auditors would also prepare formal audit reports which were filed centrally at Post Office Limited with a copy provided to the sub-postmaster, who had the opportunity to provide comments in response or at the closing meeting referred to above.

According to a former Post Office Limited auditor, low value shortfalls / surpluses were common, and when they occurred, the sub-postmaster had to pay in / withdraw the difference. If a larger shortfall was identified during an audit, next steps would be considered based on thresholds contained in an authority matrix. ⁴⁸ If a shortfall above a certain threshold was identified, the auditors were required to notify the RNM and prepare a more detailed audit report, which was sent to the RNM.

If significant issues were identified during the audit, the audit team would notify the RNM immediately. If issues had been identified during the preparation of the audit, it was most common for the RNM to attend. If there was any admittance of theft, the sub-postmaster would be requested to leave immediately and hand over the keys to their offices, effectively relinquishing their position.

⁴⁷ Interview with Employee 2.

⁴⁸ Kroll did not identify any such document during our review, and the employee did not have any recollection of the values contained within this document.



4.1.2 Investigations

Investigations were initiated at the request of an RNM following the results of an audit or based on Post Office Limited's investigations team's own analysis. There were approximately 120 investigators across Post Office Limited and Royal Mail Group during the period of review, and these investigators focused on various areas including product specific fraud (for example pensions). Employee 2 stated to Kroll that their own team was a subset of the 120 referenced above and comprised three people responsible for subpostmaster investigations in one region.

Investigators did not have official warrants but were required to identify themselves so they would be recognised by sub-postmasters. During an investigation, the sub-postmaster would be interviewed by the investigator(s) in accordance with PACE, a common method used for conducting investigative interviews.⁴⁹

As set out above, in certain circumstances (for example if there was admission of fraud), a sub-postmaster would be suspended on the day of the investigation, and their keys would be removed. If an investigator was not available to attend an audit where an issue had been identified, the auditor could remove the keys. Further investigation would be conducted, and a final meeting would be held with the sub-postmaster where their suspension or termination would be discussed. These meetings typically took place a matter of days after the initial suspension. When a suspension took place, a replacement/relief sub-postmaster was found by Post Office Limited to run the branch. According to Employee 2, this was always done with the suspended sub-postmaster's permission when they were responsible for the investigation.

Following an investigation, if suspension occurred, the investigation reports and/or workpapers and any supporting documentation retrieved by the investigation team (for example copies of accounting records, including Capture printouts) were sent to Post Office Limited's Solicitor's office. These packs also included recommendations, such as suggestions for charges.

Current employee 2 stated to Kroll that in one case investigated by them, a sub-postmaster stated that a Capture error had resulted in the shortfall. Current employee 2 retrieved the disk containing the Capture software and sent it to Post Office Limited's computer forensics team but stated that they did not identify any evidence of software issues.

⁴⁹ PACE, also known as PEACE stands for a five stage process, from preparation to closing. This method is used by many UK law enforcement agencies.



4.1.3 Other Post Office Limited control activities

From interviews, we understand that a number of other activities undertaken by Post Office Limited and Clients formed part of the general control environment. These included:

- The data entry controls and reconciliations carried out by PFD in Chesterfield (see section 3.2);
- Communication between multiple groups within Post Office Limited to verify / check issues; and,
- Issues raised by RNM's to various departments in Post Office Limited, including at times, the Capture development team or the Capture helpdesk.⁵⁰,

4.2 Observations

4.2.1 Capture issues not shared with Post Office Limited control functions

We understand from interviews with Former Employee 3 that Capture bugs and related issues were not formally shared with Post Office Limited control functions (for example legal, audit and investigations). Issues with the Capture software resulting from these bugs (including errors in shortfalls) may not have been taken into account or specifically investigated by the audit and investigation teams when conducting their work.

Kroll has not been able to find during the course of the investigation documentary evidence of internal communication regarding the identification of Capture software issues and Post Office Limited's approach to dealing with Capture software faults. In addition, review of documentary evidence from branch files (section 6.2.4) has produced no evidence of internal Post Office Limited communications regarding Capture software issues in relation to shortfalls.

4.2.2 Contemporaneous knowledge of Capture issues

Kroll was informed in interview that Postmaster 2 (now deceased) – alongside another sub-postmaster not interviewed by Kroll - established a group named sub-postmasters Grid and/or sub-postmasters Catch 22 in the late 1990s to help other sub-postmasters who had been prosecuted. According to interview testimony, email correspondence related to this group suggests that there were issues with Capture experienced by multiple sub-postmasters. Kroll has not had sight of this email correspondence.

⁵⁰ We have reviewed evidence that RNMs corresponded with the Capture Helpdesk in branch files.



From interview testimony, we understand that the sub-postmaster not interviewed by Kroll (referenced above) met with POIT in Farnborough to try to identify the Capture related fault. We were informed that, following this meeting, an email originally from POIT was forwarded to Postmaster 2 to ask the group about Capture problems. This email implied that the problems related to Capture were known or suspected by POIT. Kroll has not had sight of this email.

4.2.3 Capture issues not considered in investigations

Several sub-postmasters informed Kroll that, although they reported issues with Capture to RNMs, these were not followed up by Post Office Limited or taken into account in audits and investigations. Based on interviews conducted by Kroll, we understand that in some cases these sub-postmasters were subsequently suspended and/or convicted (see TABLE 4). We have set out several examples below:

Example 1: Postmaster 8 stated to Kroll that their first shortfall using Capture was reported to the RNM. Subsequently, following a shortfall of over £1,000 identified during an audit, they attempted to demonstrate to the auditors that the error was as a result of Capture. The sub-postmaster calculated the weekly cash balance manually, using an excel spreadsheet, and using Capture. Only the Capture version resulted in the shortfall. The sub-postmaster informed us that the auditor refused to believe that Capture was calculating an erroneous balance and continued to believe that the sub-postmaster had taken the cash. Kroll reviewed the branch file for this sub-postmaster, but it did not contain any relevant documents.

Example 2: Postmaster 6 stated to Kroll that before implementing Capture, they would occasionally receive error notices for timing and reconciling items (see section 3.2). Following the implementation of Capture, the sub-postmaster stopped receiving error notices although they still had calculated shortfalls, and this was reported to the RNM. The sub-postmaster told Kroll in interview that for a period they returned to using manual ledgers which calculated correctly, but were told by Post Office Limited that they had to return to using Capture as they were classed as a Capture branch for accounting purposes by PFD. Postmaster 6 stated in interview that in their experience, "they" (the Post Office Limited auditors/investigators) did not suspect that the calculated shortfalls were related to software or hardware issues, but instead suspected theft by staff / family members.

Example 3: Postmaster 7 told Kroll that they reported a large Capture shortfall to Post Office Limited and following this, the Post Office Limited investigations team installed security cameras to determine whether staff were stealing cash. No evidence of theft was obtained through the camera footage, but the sub-postmaster did terminate a member of staff for theft.

Example 4: Postmaster 9 informed Kroll that although reluctant to start using Capture, they were told by their RNM that it was part of Post Office Limited's strategy of automation and that it would be installed



regardless. Once they started using Capture, they also stopped receiving error notices within 6 to 8 weeks, despite the software calculating shortages. The sub-postmaster told Kroll that they understood the error notices to be part of the overall control system of the weekly reconciliation process (see section 3.2) in place at Post Office Limited, particularly in relation to shortfalls. The sub-postmaster told Kroll that they reported the concerns to their RNM, as they realised, they would have to make good the shortages as no error notices had been issued. When this was reported, the sub-postmaster was reportedly told to stop being a "troublemaker" and that they were the only one experiencing balancing issues with Capture. However, the sub-postmaster told Kroll that they discussed the balancing issues with neighbouring post offices, who also experienced issues.

Postmaster 9 was eventually suspended for a shortfall that the sub-postmaster attributed to an error with duplication of vehicle licensing which was identified during an audit. The sub-postmaster told Kroll that they knew that duplication of vehicle licenses in the system was an issue in Capture as they had seen it described in Post Office Limited newsletters (although the exact nature of the issue is not clear, Kroll has seen issues related to motor vehicle licenses ("MVL") referenced in documentation (see in the list of Capture issues included in section 12). The sub-postmaster told Kroll that this was not considered in the audit leading to their suspension.

Example 5: Postmaster 18 (now deceased) started using Capture in 1993 on a Post Office Limited provided computer. We understand from interview testimony of a relative of Postmaster 18, that Postmaster 18 reported shortfalls to the Capture Helpdesk but was reportedly advised to wait for the system to be rebalanced (by error notices issued by Chesterfield). Documents reviewed by Kroll indicate that Postmaster 18 stated that they did not receive error notices from PFD for a period of about 18 months prior to their suspension. Postmaster 18 was subsequently suspended and convicted following an audit which identified a shortfall between the cash on hand and the cash per cash balances. Kroll received a document pack from relatives of Postmaster 18 and according to this documentation, the discrepancies related specifically to the pensions and allowances area. Relatives of Postmaster 18 informed Kroll that Postmaster 18's legal team engaged with a computer expert who examined Postmaster 18's hard drive and the Capture software, and that issues related to the hardware and software were being considered in their legal defense. Relatives of Postmaster 18 informed Kroll that ultimately, the computer expert did not testify in Postmaster 18's defense due to a conflict of interest. We were not able to substantiate the

⁵¹ Kroll reviewed a letter from POIT which was prepared for use in Postmaster 18's legal case, which stated that their records indicated that Postmaster 18 had called the Capture Helpdesk on 15 occasions. 13 of these were classified as "education" calls with queries on how to use the programme; one was to report a faulty keyboard and one was to report a misbalancing related to lottery transactions. The letter states further: "I should add that it is not uncommon for users to suspect Capture is responsible for misbalances. With correct use, Capture could not cause misbalancing".



reasons for this. Furthermore, Kroll has seen correspondence between the legal team and the computer expert but has not seen the computer expert's report.

Example 6: Kroll was provided with a collection of materials from the partner of Postmaster 2 (deceased), including PACE interview transcripts and materials from court hearings surrounding her prosecution. In August 1992, Postmaster 2 was sent a letter from the Capture team enclosing the Capture user manual and installation disk. Postmaster 2 was not provided training as she was noted as "computer literate". ⁵² In December 1999, Postmaster 2 attended a PACE interview, following an audit the prior day identifying a shortage of £36,078. ⁵³ The transcripts of the interview indicated Postmaster 2 was unable to explain the variance, but was instructed by investigators and/or auditors to enter certain figures on Capture to reflect their own calculations. ⁵⁴ Postmaster 2 also raised issues about Capture throughout their suspension, termination and subsequent prosecution, including that their replacement sub-postmaster also recorded variances between the stated Capture balance and cash and stock recorded on hand, which Postmaster 2 was of the view that this was insufficiently considered by Post Office Limited auditors and/or investigators.

⁵² Letter to Postmaster 2, 6 August 1992

⁵³ Interview transcript, page 12, 1 December 1999

⁵⁴ Interview transcript, page 13, 1 December 1999



5 Sub-postmasters' Testimony

This section outlines Kroll's approach to obtaining witness testimony from sub-postmasters who used Capture and came forward to support the investigation. Our primary focus was to understand the experiences of sub-postmasters in using Capture.

5.1 Approach

Kroll has conducted 21 interviews with former sub-postmasters and/or their families, who used Capture and offered their support to the investigation. One further sub-postmaster provided written testimony, making a total of 22. Interviews were conducted virtually, or in-person, and were typically attended by a senior member of Kroll staff, accompanied by a notetaker.

As highlighted in section 2.2.5, given the amount of time that has elapsed since the roll-out of Capture, it is understandable that recollections from interviewees can vary in detail and accuracy. Where possible, Kroll has sought to corroborate information relayed during interviews with documentary evidence. Due to the number of interviews conducted, it has been possible to compile key thematic findings arising from them, which are covered in detail below and we have further sought to compare and contrast individual testimony where appropriate.

Interviewees were advised of Kroll's Terms of Reference and asked, dependent on their recollection, a set list of thematic questions surrounding their experiences as set out below, together with specific follow-up areas dependent on their responses:

- Basic information around their role as a sub-postmaster;
- Daily and weekly processes;
- Their use of Capture;
- Actions taken by Post Office Limited in respect of any shortfalls, audits or investigations; and
- Availability of documentation or further areas for investigation.⁵⁵

⁵⁵ We did not specifically cover the area of compensation or restitution with sub-postmasters, and no related evidence was brought forward of sub-postmasters being provided with such relief following any detriment or loss that was suffered.



It should be noted that, during the course of the engagement, three sub-postmasters (Postmaster 3, Postmaster 5 and Postmaster 16) who came forward to support the investigation were subsequently found not to be Capture users, based on documentation provided by Post Office and the time frames intimated as to when shortfalls occurred. The replacement sub-postmaster for Postmaster 3, a family relative, was sent documentation by Post Office Limited which indicated a condition of their employment was to purchase Capture "to ensure quality and accuracy of accounts". ⁵⁶ Kroll liaised with DBT to direct them to appropriate channels if required.

In the case of a further five deceased sub-postmasters (Postmasters 3, 11, 12, 17 and 19), their Capture usage has yet to be fully confirmed based on information provided in interview and documentation reviewed. In respect of the geographical composition of Kroll's witnesses, Kroll interviewed 17 sub-postmasters that were based in England. A further four were based in Wales, with one in Scotland.

Kroll interviewed 12 sub-postmasters who were suspended by Post Office Limited, in all cases associated with the results of audits undertaken. It should be noted that two of these suspensions occurred after 1999. We understand that by this point, Horizon had been deployed in post offices. Of these 12, eight were prosecuted, two resigned, and two were terminated from their employment. A further seven sub-postmasters were never suspended, but advised Kroll that they ended up selling their branch, in part or whole, due to losses they sustained during Capture use.

TABLE 4 Basic details surrounding sub-postmaster population, including: (i) Kroll's independent confirmation of the sub-postmaster being a Capture user; (ii) the region where their branch was based; and (iii) key details surrounding the perceived impact of their Capture usage, including any suspensions and further punitive actions taken; (iv) the estimated total value of shortfalls incurred by the sub-postmaster during the period they used Capture to produce weekly accounts, based on interviews and documentary evidence^{57 58}. We have also noted where sub-postmasters advised Kroll they sold their branch.

#	Confirmed Capture User	Region	Details	Estimated total shortfall (£)
1	Yes	England	Suspended (1997), Resigned	£1,001 - £10,000
2 (deceased)	Yes	England	Suspended (1994), Prosecuted	More than £10,000
3	No	England	Suspended (1995), Prosecuted	£1 - £1,000
4	Yes	England	Suspended (1997), Prosecuted	More than £10,000
5	No	England	Non-Capture user	£1,001 - £10,000

⁵⁶ Postmaster 3 Branch File, page 357.

⁵⁷ We note that the businesses of post offices may have been different in the 1990s from today with potentially more cash and larger volumes of transactions being handled on a weekly basis, depending on location. In addition, the total shortfalls are estimates at 1990s value.

⁵⁸ Estimates are based in some cases on secondary evidence provided by sub-postmasters. The estimated ranges are not based on any calculations by Kroll, instead are based on interviews and documentary evidence.



#	Confirmed Capture User	Region	Details	Estimated total shortfall (£)
6	Yes	England	No suspension (sold), made bankrupt	More than £10,000
7	Yes	England	No suspension (sold)	More than £10,000
8	Yes	England	No suspension (sold)	More than £10,000
9	Yes	Wales	Suspension (1999), Terminated	More than £10,000
10 (deceased)	Yes	England	No suspension (sold)	£1,001 - £10,000
11 (deceased)	Unclear	England	Suspended (1994), Prosecuted	Unknown
12 (deceased)	Unclear	England	Unknown	Unknown
13	Yes	England	Suspended (1994), Terminated	Unknown
14	Yes	England	Suspended (2000), Resigned	£1,001 - £10,000
15 (deceased)	Yes	England	No suspension (sold)	£1,001 - £10,000
16	No	England	Non-Capture user	More than £10,000
17 (deceased)	Unclear	Scotland	Suspended (1997), Prosecuted	Unknown
18 (deceased)	Yes	England	Suspended (1996), Prosecuted	£1,001 - £10,000
19 (deceased)	Unclear	Wales	No suspension (sold)	Unknown
20	Yes	Wales	Suspended (2005), Prosecuted	Unknown
21	Yes	England	Suspended (1998), Terminated	More than £10,000
22 ⁵⁹	Yes	Wales	No suspension (sold)	More than £10,000

5.2 Observations

5.2.1 Inconsistent training

Former employee 3, who was involved in the initial conception and development of Capture, outlined their understanding that training was a requirement for new Capture users, and that each District Manager⁶⁰ nominated a "member of the sub-post office team"⁶¹ as a trainer for users of Capture in their respective area. The nominated individual received initial training from the Capture development team. The local trainer would be tasked with setting up the Compaq computer (if purchased by a sub-postmaster) and would confirm the floppy disks worked. Lastly, trainers would go through a "training package" with users – Kroll have not been able to identify a copy of the training package referred to.

⁵⁹ Written responses only.

⁶⁰ According to Kroll's interview with Employee 1, the terms changed over the years. District Managers were also referred to as Area Managers or Retail Network Managers by Post Office Limited, and it is understood that they were broadly similar titles.

⁶¹ We are unclear whether this means sub-postmasters individually or the staff body as a whole.



The depth and consistency of training on Capture appears to have varied across users. Contextually, the computer system utilised for Capture may well have been the first computer used by respective sub-postmasters and given the decentralised nature of Post Office Limited at the time, it is not unreasonable to assume the quality of training may have varied by district and trainer.

Eight sub-postmasters or relatives of sub-postmasters advised Kroll that training of the use of Capture did take place, albeit many commented that it was basic. Postmaster 4 commented that they received a manual with floppy disks, but no formal training. Postmaster 7 was provided "*minor in-house*" training on how to insert a floppy disk and enter data. Postmaster 9 did not believe they had received formal training, only that "*someone told me how to plug it in and that I should ring the helpdesk if I had any problems*". A relative of Postmaster 12 (deceased) commented that the late sub-postmaster had remarked that they did not understand Capture after the training, and that "*the supervisor*⁶² was useless".

Two sub-postmasters, being Postmaster 14 and Postmaster 22, stated they received no training.

5.2.2 Perceived pressure from Retail Network Managers and Area Managers to adopt Capture

Several sub-postmasters came forward to express concerns that they were pressured to adopt and use Capture by various figures in seniority, including RNMs and AMs. Whilst generally there was no obligation on sub-postmasters to use Capture⁶³, however certain sub-postmasters recalled that pressure was exerted on them owing to the time and costs invested in Capture's development, as well as the efficiencies it was said to bring to post offices. Kroll has not spoken to any former RNMs or AMs who were able to comment upon these perceived pressures.

Postmaster 9, who was reluctant to use Capture, said it was explained to them that "the change [to Capture] was necessary to be more appealing to new customers" and that "[Postmaster 9's RNM] informed [Postmaster 9] that it was going to be installed" despite their reluctance. Similarly, Postmaster 13, who started using Capture in 1993, "was not given a choice", and stated that they were advised they had to move to Capture. Postmaster 20 also advised that their AM informed them they had to move to Capture.

Former employee 3 referenced to Kroll in interview that sub-postmasters were advised to move back to manual processes if they encountered an issue with Capture. Certain sub-postmasters interviewed

⁶² Unclear whether referring to Area Manager, District Manager or trainer for Capture.

⁶³ We have identified some references to Capture forming part of sub-postmaster's contracts, set out in section 6.2.4.



relayed that RNMs and AMs had indicated that sub-postmasters were required to use Capture after having purchased the software, and that they were unable to revert to previous methods.

Postmaster 4 commented that their RNM "made it clear I was not to continue using the manual system" after they started using Capture. Postmaster 6, who had started to incur shortages after using Capture, received an Error Notice from PFD and had stopped using Capture in the intervening period. They advised Kroll that "I was then told [by their RNM] I had to get back on Capture because I was classed as a Capture office, and so Chesterfield [PFD] expected to see their accounts in a certain way", suggesting an obligation on the sub-postmaster to use Capture as well as a central repository of Capture users held by PFD or Post Office Limited.⁶⁴

Postmaster 9, who was reluctant to use Capture as set out above, stated that they originally conducted manual balancing alongside Capture for their own benefit, but that their RNM "told me to stop, because Capture had been invested in to save money and time". Postmaster 9 continued doing manual checks alongside Capture.

5.2.3 Sub-postmasters' understanding of their responsibility to reimburse shortfalls

Kroll has reviewed a template contract, which we understand was in use during the 1990's. This contract states the following in relation to sub-postmasters' responsibility regarding shortfalls:

"You will be legally responsible for the Post Office Counters Ltd cash and stock entrusted to your care, and for any losses that may occur through negligence, carelessness or error. You are forbidden to make use of the balance due to Post Office Counters Ltd for any purpose other than the requirements of the public service, and must, on no account apply to your private use, for however short a period, any portion of the official funds entrusted to you. You must be careful to keep the official money separate from any other monies. Misuse of official cash or stock may render the offender liable to prosecution and will almost certainly result in termination of the services of the [sub-postmaster]."65

Kroll observed that a letter sent to a sub-postmaster not part of our population from an Agency Recruitment Manager paraphrased the above clause as a way of reminding the sub-postmaster⁶⁶ of their responsibilities in relation to shortfalls:

⁶⁴ We have been unable to identify any dataset or database held by PFD or Post Office Limited that recorded the Capture user population. According to Current employee 2, an investigator during the 1990s, they believed they received information on whether an individual branch used Capture from RNMs, as opposed to a central repository.

⁶⁵ Extract from template contract between sub-postmasters and Post Office Counters Ltd.

⁶⁶ This was from review of a branch file and related to a sub-postmaster not part of Kroll's population.



"Recent findings by the audit teams have raised doubts in my mind as to how conversant [sub-postmasters] are with certain very important Post Office regulations. As a means of protecting the investment made by yourself and Post Office Counters Ltd in the business I would like to draw your attention to the following extracts, from your Contract: ...

The Sub-postmaster is responsible for all losses caused through his own negligence, carelessness or error, and also for losses of all kinds caused by his Assistants. Deficiencies due to such losses must be made good without delay...". 67

Based on testimonial evidence from a significant proportion of the sub-postmasters interviewed by Kroll, this clause was understood by them to require sub-postmasters to reimburse (or "make good") any shortfalls that occurred.

5.2.4 Issues with shortages apparent after adopting Capture

Based on interview testimony, over different periods of time, different sub-postmasters raised issues that both shortfalls and surpluses began to be generated in greater frequency compared to prior use of manual reporting. Interviewed sub-postmasters tended to highlight these issues arising between 1992 and 1996 but emphasised that shortfalls were generally constant when using Capture.

Postmaster 14 advised Kroll that they started using Capture in November 1992 and they were an early adopter of the software. Postmaster 14 commented that shortfalls occurred "weekly" and that in the first six months of Capture, the shortages produced were around £200 a week. Postmaster 14 also stated that they did not pay the shortfalls until "someone from Chesterfield IT came and fixed the system", which, according to Postmaster 14, took two months. We note the Capture development team was based in Farnborough, Hampshire.

Postmaster 6 advised Kroll that they started using Capture in 1993. After starting to generate shortfalls "almost immediately", they advised their AM and temporarily moved back to manual reconciliations. They did not receive error notices during this period, which concerned Postmaster 6, who stated that they "had to start putting in my own money to make the loss good" and had expected error notices to advise of where discrepancies may have occurred. A sub-postmaster might to expect error notices when they were unable to reconcile weekly accounts, as clients would highlight discrepancies to PFD in their own checks, who would subsequently send error notices to highlight the discrepancies. Postmaster 13, who also

⁶⁷ Branch File [redacted], page 35.



started using Capture in 1993, remarked to Kroll that shortfalls increased once they started using Capture, and that they had difficulties using "such technology".

A relative of Postmaster 18 (deceased) advised that, based on recollections, Postmaster 18 started using Capture some time in 1993, and that they were asked to "trial" the system.⁶⁸ The relative commented that Postmaster 18 received notifications of shortfalls from Capture, despite manual records and physical checks indicating otherwise "when [Postmaster 18] checked the safe, all the money was there. It was only not present in the paperwork. What had been accounted for was present in the same, but the weekly balances from Capture were saying they had shortfalls".

Postmaster 9 advised Kroll that they started using Capture in 1993 and 1994. As an ex-auditor, Postmaster 9 displayed a detailed understanding of the reconciliation processes. They remarked to Kroll that "I had no issues with balancing [manually] and the problems only started when Capture was introduced".

Postmaster 21 advised Kroll that they started using Capture some time in 1994, and that they started having shortfalls almost immediately. Postmaster 21 advised that they would generally generate weekly shortfalls of between £30 and £600, and that they would inform their RNM of ongoing issues. Postmaster 21 advised that if they were unable to pay back the shortfall, they would put a voucher in until they were in a position to pay do so. Postmaster 21 also advised that they had received an award for having no error notices for nine months, despite having, according to their account, weekly shortfalls that ought to have triggered an error notice if the discrepancy was identified by Post Office Limited Clients.

Relatives of Postmaster 15 (deceased) advised that they may have started using Capture in 1995.⁶⁹ The relatives commented that after Postmaster 15 had started using a "*computer system*", they no longer had surpluses on a weekly basis, and losses on a weekly basis were more significant. As a result, Postmaster 15 "*had to keep finding money to put into the system*".

Postmaster 4 advised Kroll that they started using Capture some time in 1996. Prior to their adoption of Capture, they would undertake manual reconciliations between daily and weekly ledgers. Initially, while undertaking both manual reconciliations and using Capture, they found differences in the amounts owed. Postmaster 4 stated "I would re-do the weekly transactions and put in my own money to make up the shortage. Capture was saying the cash and stock didn't balance with the figure which the system said there should be".

⁶⁸ This may suggest 1992, when Capture was first rolled out.

⁶⁹ Kroll has yet to fully confirm whether Postmaster 15 (deceased) was a Capture user.



Postmaster 4 went onto state that shortfalls became more consistent once they had adopted Capture, and that they were not clear on where the shortfalls were derived from: "the losses began to appear almost immediately after I began using the system. I was having loss after loss. I would check my numbers and it would still show the same losses. I would check repeatedly and could not understand why I was short, so I put my own money in to cover the shortage, in the hope the money would re-appear later. This went on for months until the audit. The system did not differentiate between cash and stock, it just told you that you were short".⁷⁰

Postmaster 8 also advised Kroll that they started using Capture some time in 1996. Postmaster 8 advised that the differences in shortfalls or surpluses were minor prior to the adoption of Capture, but that afterwards shortfalls were generated on at least a monthly basis. Postmaster 8 stated "when I was doing the process manually, the maximum difference was £5. You knew straight away if you had done something wrong. It was obvious how to fix the errors… Within the first 6 months [of using Capture] the losses raised the question of what was going wrong, but it was perceived to be impossible that they were due to the software. At one point, I had a £4,000 loss."

5.2.5 Varying confidence with computers

Sub-postmasters contacted by Kroll came forward and remarked on a range of technical abilities and comfort with using computers. For many, the computer either purchased directly from Post Office Limited or independently was the first computer they owned. Often, sub-postmasters were reliant on staff who were more technically able than themselves to deal with issues contemporaneously arising from Capture. As covered in section 3.3, sub-postmasters were able to purchase a Compaq computer as part of the original roll-out of Capture.

Former employee 4, a former tester of Capture, advised in written testimony that limited testing was initially conducted on the software, with the focus being on the hardware specific of the computer to be supplied to sub-postmasters, being Compaq 286 and 386 computers:

"The Capture package was sold by the Post Office to sub-postmasters as a floppy disk installation for them to install on their own computers or complete with computer hardware, which I believe may have consisted of a Compaq computer and printer. This created a bit of a problem for testing as the test team could not hope to replicate every combination of hardware that was being used in the field. We therefore took the decision to test on the two most common hardware types which I believe were a 286 and the offered 386 Compaq processor and two different types of printer which were recommended to the sub-postmaster upon purchase. However, there were numerous other hardware combinations in use and of

⁷⁰ Capture did not provide a breakdown or indication of what might be causing shortfalls in its reporting.



course the Post Office had no control over what other packages were loaded onto the computers or who were using them. For many of the users it was the family computer."

Former employee 3 also referenced that initial testing undertaken by POIT was impacted by the type of computers used, and that initial trials of Capture prior to full roll-out "did not work because the computers were not high spec enough, as the system required a lot of memory on the computer".

A 'Dear Colleague' letter from Post Office Limited dated 3 February 1992 further states that Capture would only be offered as a software only option if existing computing equipment met certain requirements.⁷¹

At least three sub-postmasters commented to Kroll that they ran Capture off their own computers. The effects this may have had on their use of Capture are unknown. Postmaster 1 recalled using a Compaq PC, while Postmaster 4 also used his own unknown Compaq computer. Postmaster 8 commented that they used their own Dell DOS computer for Capture, which could also run Excel spreadsheets.⁷²

A further five sub-postmasters commented that they did not believe Capture, or indeed computers, were able to "make mistakes". A relative of Postmaster 2 (deceased) commented that Postmaster 2 had doubted themselves when shortfalls were being incurred, as they believed the computer couldn't be wrong. Postmaster 4 commented that, on the day their branch was closed, a Post Office Limited Auditor had commented to him that "the computer did not make mistakes". Postmaster 7 advised Kroll that "there was never any suggestion from anyone that losses could be the computer and system causing the shortfalls" and that "I never stopped using [Capture], I had full trust of the system". Postmaster 20 commented that "I trusted the computer because Post Office said to".

5.2.6 General awareness of Capture circulars and helpdesk

Post Office did send circulars and newsletters surrounding Capture, its development and known bugs and defects, on a periodic basis. These circulars contained details of bugs identified during testing of new versions and potential fixes. This is covered in greater detail in Section 6. The awareness of these circulars was varied with two sub-postmasters, Postmaster 4 and Postmaster 7, commenting that they did not recall receiving circulars, with Postmaster 4 adding they believed several sub-postmasters did not receive these communications from the Post Office.

⁷¹ Documentation provided by Post Office Limited [F00001765940].

⁷² This should be considered an inaccuracy – you can't run Excel on MS-DOS, you require Windows to be installed as well.



In addition, sub-postmasters were generally aware of the existence of a helpdesk, but its specific remit and effectiveness was questioned. The helpdesk was advertised both in circulars and on the landing page on Capture and was also referenced in the Capture order documentation. Postmaster 4 believed they were only able to call the helpdesk if Capture itself was not working, rather than for general queries. Postmaster 7 also commented they were not aware of a helpdesk. Postmaster 9 advised that the helpdesk was not generally available, and that it would take "35-40 minutes to get a response" – instead, they contacted their RNM to report issues with the software and potential shortfalls.



6 Documentary Evidence

This section comprises an overview of the documentary evidence Kroll has been able to access during the investigation, including how this documentation evidences, substantiates or contextualizes witness testimony provided by sub-postmasters.

6.1 Approach

Kroll has sought to gather available documentation from a variety of sources in order to evidence, substantiate or contextualise other information gathered during the course of our investigation. The vast majority of documentation gathered was received from three sub-groups:

- Post Office Limited, including circulars and newsletters, documentation from the Post Office Museum and Facility 1, Branch files and loose communications identified by the Post Office Limited remediation team prior to Kroll's engagement;
- A subset of former sub-postmasters who hold relevant documentation related to their use of Capture;
- Former Employee 1 and Former Employee 2, who had independently collated subsets of documents from the above two groups based on their own enquiries.

During the course of the engagement, Kroll was made aware of various datasets accessible by Peters & Peters LLP - Post Office Limited's external legal counsel - who, among other areas, undertook a process to identify and review potentially unsafe convictions by Post Office Limited, initially in the context of the Horizon IT scandal. Kroll was provided access to these datasets on 21 August 2024 (see section 2.4.3 and 2.4.4).



6.2 Observations

6.2.1 Documented monitoring of Capture roll-out references the volume of calls received by the helpdesk and raises possible resource concerns around fault fixing and development

Documentation reviewed by Kroll included a performance analysis of Capture dated October 1992,⁷³ which includes a summary of the calls received by the Capture Helpdesk based on issue type (Education, Hardware, Software, Other). The report highlighted that, for the three months ending October 1992, 13 percent of calls to the Helpdesk were classified as "Software" related. The report further states that "*Many calls were about known faults such as incorrect MVL [Motor Vehicle Licenses] summaries and a fault in double entry check for P&As [understood to be Pensions and Allowances]*. The report also mentioned that the Capture Helpdesk received calls about the system "crashing" and further stated that "a number" of the faults were rectified in Release 20 (understood to refer to C20).

The report did indicate that the time given to assisting "software only sites"⁷⁴ with installation, configuration and use of Capture "remains a cause for concern. This small group of users takes up a disproportionate amount of the technical resource available to the project and may impact upon "mainstream activities such as fault fixing and development work".

Kroll has not been provided with or identified any monthly performance reports prepared after this date, and therefore we are unable to comment on whether or how the concern raised above was addressed by Post Office Limited.

6.2.2 Publication and awareness of Capture errors and bugs through circulars

Post Office Limited undertook the circulation of various newsletters and bulletins during the 1990s to share information with sub-postmasters, including on the performance of Capture. Whilst Kroll does not hold a complete set of these bulletins, a large number of the circulars make reference to known bugs and errors in Capture versions across its period of use. It should be noted that, by-and-large, the circulars make references to potential fixes of these bugs and errors. However, we have no way of confirming: (i) the timeliness of these circulars being sent from when issues were identified; (ii) the extent to which all circulars were received and/or read by sub-postmasters; (iii) the ability of sub-postmasters to be able to

⁷³ Title of report: Capture Monthly Performance Analysis October 1992 included in document ID F00001765940.

⁷⁴ Understood to refer to branches that purchased the Capture software without the additional hardware package.



implement suggested fixes of the bugs; and (iv) the extent to which PFD, Audit and Investigations functions were aware of these errors and bugs and its potential impact on regular reporting.

A broad summary of bugs and errors identified throughout various circulars is included below. Several typologies of transactions, including Motor Vehicle Licenses ("MVLs"), Pensions and Allowances and Remittances were common areas for bugs and errors throughout the duration of Capture. A full list of issues identified is contained in the appendices.

- In November 1992, the first edition of Captivation was published, which was a specific newsletter for Capture users. The newsletter highlighted three "small bugs" that would be amended in the forthcoming Capture update, as well as warning of the risk of damaged and lost data if the computer was switched off before backing data up. In December 1992, a further edition of Captivation was published which referenced a new version of Capture, C25, would be released, with "all the bugs" referenced in the previous edition being fixed, but with a number of additional risks identified such as spikes in power usage, screen burn and difficulties with end of week routines.
- In June 1994, a further edition of Captivation was published. The issue highlighted concerns
 around the recent release of Capture C40, which the team were looking to "remedy as a matter
 of urgency". Issues highlighted in the circular included double entry checks, pensions and
 allowances outputs, Green Giro outputs and general faults.⁷⁷
- In December 1994, the first edition of Focus was published, which was a follow on from Captivation. The circular highlighted that a new version, C45, had been released, and was considered a "huge improvement" on C40. The Capture team noted its apologies to offices in the London Cash Account area who "suffered longer delays due to a continuing fault in their software version", as well as procedures for power failures affecting Capture usage. It should also be noted that the newsletter made reference to sub-postmasters who wrote in to say C45 was a "huge improvement" on the previous C40 version.⁷⁸
- The April 1995 edition of Focus highlighted a number of "*hiccups*" associated with the Capture C50 release, including issues with system speed, pensions and allowance double entry checking, first rate currency and automated payments.⁷⁹ The September 1995 edition mainly covers the roll

⁷⁵ Captivation, November 1992.

⁷⁶ Captivation, December 1992.

⁷⁷ Captivation, June 1994.

⁷⁸ Focus, December 1994.

⁷⁹ Focus, April 1995.



out and issues associated with Capture II, which was a complete re-write of the system and, we understand, was cancelled shortly after roll-out. The circular noted "following the go-live of the MVL offices, serious problems – which did not appear during either the acceptance testing or trial stages of the development were reported by our customers. In many cases, this has meant that the office has been advised to revert to C50 and we continue to advise this course if other offices begin to experience problems".⁸⁰

- The March 1996 edition of Focus highlighted that a number of offices were still using Capture II,
 a system with known bugs, and that sub-postmasters were instructed not to use the system.⁸¹
- The April 1996 edition of Focus, the Capture team advised they were working towards the release of Capture C70, which would "include fixes for a number of existing software faults".⁸²
- The September 1996 edition of Focus advised that no updates had been made to Capture since 1995, and that "an enhancement release was felt by all, long overdue". It should be noted that the Capture team also issued a 'change of details notification' request to ensure newsletters were distributed to all Capture users, suggesting there was not complete confidence that all Capture users were recorded centrally.⁸³
- In the June 1997 edition of Focus, the Capture team advised they hadn't published a newsletter for nine months owing to three different versions of Capture being developed and distributed in the period due to various faults. Firstly, a fault fix release was sent given an error with cash account dates for the Christmas 1996 period. Secondly, in January 1997, Capture C70 was released following various fault fixes prioritised by the 'Focus' group of Capture users. Due to the number of changes, the upgrade was split over two phases, with a further release of Capture C80 being rolled out in March 1997.⁸⁴

The severity and impact of bugs and errors reported through *Captivation* and *Focus* varies in materiality, from a minor formatting inconvenience through to misrepresentation of entries. Kroll has sought to review known bugs and errors found on corresponding versions of Capture we have access to. Details of the testing undertaken is contained in section 7.

Issues with Capture were also reported in more general circulars published by Post Office Limited and sub-postmasters. It should also be noted that Kroll has identified an internal letter, dated September 1992

⁸⁰ Focus, September 1995.

⁸¹ Focus, March 1996.

⁸² Focus, April 1996.

⁸³ Focus, September 1996.

⁸⁴ Focus, June 1997.



(i.e. shortly after the release of Capture) whereby it was referenced that Capture had received "deplorable" coverage in Sub-postmaster, a nationally circulated publication for sub-postmasters, which could only "damage the product". The author had suggested they believed the coverage had been orchestrated by rival suppliers to Capture, and as such Post Office Limited "should work covertly to ensure that [the publisher] is bombarded by letters in support of the system". Kroll has not been able to review contemporaneous versions of Sub-postmaster.85

A March 1994 edition of *Counter Couriers* discussed the negative experience of a sub-postmaster with Capture. The sub-postmaster had written to *Counter Couriers* to advise that "major faults known for more than 12 months have still not been corrected". Post Office Limited sent a Retail Network Manager, who had also acted as a Capture Installation Manager, to support the sub-postmaster. In the article, the RNM commented that "I think [the sub-postmaster] was basing his comments on his experience with home computer systems which are obviously tried and tested to perfection before being released onto the market. Capture is very different. It's completely new and tailor-made for a particular business so, to a large extent, we have had to learn from things that go wrong. If we waited for it to be absolutely perfect, then it would never get out into the marketplace". The sub-postmaster went onto comment that they had a number of balancing errors when using Capture following its purchase in May 1993.⁸⁶

In May 1994, there were two further articles in *Subpostmaster* magazine which criticised Capture and identified potential areas of concern. Firstly, one sub-postmaster advised that they had issues surrounding the October 1993 update of Capture to C35, whereby "*after loading C35 I wasted the next Wednesday afternoon looking for a £75 difference caused by the Rems Out section having 'been corrupted'*". The sub-postmaster also raised concerns around the testing and trialing that was undertaken prior to Capture C40 being released, given the number of issues.⁸⁷

6.2.3 Publication and awareness of Capture errors and bugs through release documentation

Upgrade release notes were circulated by the Capture development team following the release of new versions of the software. The upgrade release notes also included references to known bugs and errors in the software at the point of release. Several examples of these are included below:

• In the Capture C25 upgrade, a fault was noted when "[the sub-postmaster] rolls over into a new cash account week and have chosen not to carry forward your cash and stock figures. Although

⁸⁵ Capture Business Plan and Performance Analysis 1992, letter dated 16 September 1992, page 349.

⁸⁶ Counter Couriers, May 1994.

⁸⁷ Subpostmaster, May 1994.



the system erases the total value in the cash and stock screen, it still retains the underlining quantity details in the new sub-screens. It will therefore be necessary to check each of the new sub-screens at the end of the week to ensure that the stock details relate to the current week and not the previous week". The fault was considered not serious enough to delay the release of Capture C25.⁸⁸

- In the Capture C35 upgrade, it was noted that the Remittances Out section was "corrupted" and that sub-postmasters who had made entries on the Thursday, Friday and Saturday prior to the upgrade would have to follow certain remedial actions.
- In April 1993, the Capture help desk team released a 'Capture Troubleshooting Guide', which was produced "as a result of identifying the most common problems and queries received at the Help Desk". ⁹⁰ The guide included 10 common errors or issues, including areas such as the printer printing different Client Summaries than what was requested, as well as corrupted data.
- In the Capture C50 upgrade, it was noted that "we have tried to ensure that C50 is a stable release with no inherent faults, and we are confident that you will find the improvements beneficial. Even so, it is unlikely that every fault has been banished from the Capture System and, as with the development of any software package, new releases do tend to introduce their own problems". The release note went onto state that they had identified two errors, including daily reports for 'cheques for processing' being recorded as £nil.⁹¹
- In the Capture C90 installation notes, it was also noted that "the value of both Home Help/Care Stamps and Game Licenses recorded in the Cash & Stock on Hand screen would be carried forward during the End of Week routine, even if you have requested that your stock figures should not be carried forward".⁹²

6.2.4 Documentation contained in Branch Files

As referenced in section 2.2, Kroll was provided with two sets of Branch Files held by Post Office Limited. The two subsets covered: (i) Branch Files that were identified by Post Office Limited prior to Kroll's engagement; and (ii) Branch Files identified for sub-postmasters who provided consent for Kroll to share their details with Post Office Limited for the purposes of the investigation. Branch Files hold information

⁸⁸ Capture C25 Upgrade Release Notes, undated.

⁸⁹ Capture C35 Upgrade Release Notes, undated.

⁹⁰ Capture Troubleshooting Guide, April 1993.

⁹¹ Capture C50 Upgrade Release Notes, undated.

⁹² Capture C70 Installation Notes, undated.



relating to the employment, performance, investigation and/or termination of sub-postmasters. Many Branch Files appear incomplete or have been found missing owing to the time that has elapsed. Branch Files also contain sensitive and/or privileged information – Post Office Limited advised Kroll that privilege was waived for the purposes of our investigation and to facilitate our subsequent review of them.

Our review of available Branch Files found limited information specifically related to the use of Capture contained in the materials for individuals who had offered support to our investigation. The Branch Files generally appeared to include sporadic correspondence between sub-postmasters and their RNMs and AMs, particularly related to issues following suspension and termination, with limited to negligible correspondence surrounding their use of Capture.

However, based on a broader range of Branch Files provided by Post Office Limited and collected prior to our engagement, we note a number of instances whereby sub-postmasters had raised Capture related issues to Post Office Limited. Examples of these are included below.

• In March 1996, an RNM interviewed a sub-postmaster under caution, related to their partner admitting the inflation of pension and allowance figures. The sub-postmaster, who, according to notes, "cannot work and did not understand Capture" also stated that their partner "was afraid of making QPA errors... [the sub-postmaster] did not feel as though [the partner] knew what they were doing, and problems began with Capture". The sub-postmaster stated they did not attend an introduction course for Capture.

In the offender report produced for this sub-postmaster, it was also noted that a fault may have occurred, whereby a print defect meant totals and values were printed on incorrect lines, contributing to the fraud. However, Post Office Limited opted not to secure the computer and equipment, as this was in daily use at the branch and would have impacted day-to-day business. The sub-postmaster was reinstated, on the basis that the partner had restrictions in their involvement in the branch.

• In May 1996, a member of the Capture development team sent a letter to the Post Office Limited Investigations Department surrounding a Capture C50 disk sent for examination. The Capture development team member had referenced a known fault in the Capture software surrounding Pension and Allowance transactions, specifically when "a bulk entry of dockets is double checked using the facility on the Capture software for this purpose", and further advised this had been

⁹³ Branch File [redacted], page 27.

⁹⁴ Branch File [redacted], page 13.

⁹⁵ Branch File [redacted], page 55.

⁹⁶ Branch File [redacted], page 27.



raised in *Focus* newsletters of April 1995 and March 1996.⁹⁷ During the course of a separate sub-postmaster's interview, and as summarised in the offender report, the sub-postmaster had "recently incurred a number of substantial losses which they attributed to a fault with his computerised accounting system (Capture). [The sub-postmaster] explained that the fault, apparently admitted by POCL in a newsletter, related to the C50 disk and affected in the main his claim for paid P&A's".⁹⁸ The Post Office Investigations Department concluded complaints associated with Capture were a "red herring", as the sub-postmaster "chose to falsify his accounts despite the fact that he was fully appreciative of the proper procedures he should have adopted".⁹⁹ The sub-postmaster was terminated and recommended for prosecution, according to available records.

We have also seen evidence that the purchase of Capture was a condition in some sub-postmasters' contracts. A family relative took over the running of the post office in 1996 following Postmaster 3's suspension in 1995. The contract had the clause "To ensure quality and accuracy of accounts you agree to purchase a computer accounting system CAPTURE (Within 6 months of appointment)". 100 In addition, an offer letter for appointment of a sub-postmaster from December 1995 at another branch also included the condition of appointment "to purchase capture accounting system for Post Office Accounting within three months of appointment". 101

⁹⁷ Branch File [redacted], page 77.

⁹⁸ Branch File [redacted], page 57.

⁹⁹ Branch File [redacted], page 58.

¹⁰⁰ Branch File [redacted], p357

¹⁰¹ Offer letter to [redacted], p1



6.3 Limitations

6.3.1 Email and electronic data

Whilst Kroll has not conducted a review of available electronic data, we have been provided with existing email correspondence identified during the pre-investigation conducted by Post Office Limited. One such excerpt of email correspondence, which was provided by Post Office Limited's Remediation Team as part of their briefing materials, makes reference to Capture users experiencing issues with corrupt disks or wrongly categorised accounts, and being required to make up shortfalls. In July 1999, a Performance Improvement Manager wrote to a number of RNM group email addresses, saying "we have had several challenges recently where offices using computerized cash accounts have been supplied with either corrupt disks or a provincial cash account instead of a London cash account... [Chesterfield] feel that errors should not be removed just because a disk is corrupt or a wrong disk is supplied because all computers are only as good as the person using them and the cash accounts must be checked before they leave the office".

A response on the same day was sent by an individual (presumed to be an RNM), whereby they advised a sub-postmaster had received 39 errors in one week due to a faulty Capture disk. The response of the Performance Improvement Manager relayed that PFD stated, "it appears the majority of the errors are caused by SPMRs not doing what they are supposed to when updating their systems". The RNM responded that "whilst I accept the argument that sub-postmasters are responsible for checking their cash accounts, they were encouraged to take up Capture and have every reason to trust the software provided, particularly when London cash account is shown". 102

¹⁰² Email correspondence, July 1999.



7 Examination of Capture Software

This section contains Kroll's approach to the forensic testing of the Capture software and the results of the testing, as described in more detail below:

7.1 Approach

7.1.1 Aim and overall approach

The aim of this work, as per Kroll's Terms of Reference, was to examine the Capture software copy held by an investigator supporting sub-postmasters to determine if and how that copy of the software identified shortfalls.

Our approach to examine the Capture software followed these steps (which are set out in detail in the following sections):

- Obtain Capture software Kroll has identified 19 versions of Capture software released to users by Post Office Limited which are appended in section 11 (see section 7.1.2);
- Identify which reported Capture issues could be tested with the available software (section 7.1.3);
- Prepare a testing environment in a virtual machine (a digitized version of a physical computer)
 with the same operating system (MS-DOS) installed in the testing environment in order to replicate the computers used by sub-postmasters to operate Capture originally (section 7.1.4);
- Create and follow a test script for each issue to be tested. The script specified a set of actions the
 tester would conduct on the Capture software installed in the testing environment, in an attempt
 to replicate the identified issue (section 7.1.5); and
- Identify how the Capture software stored data at each step in the test script. We observed that the Capture software stores the data it requires to operate in a number of different files. By observing the changes in these files at each step in the test script we able to observe how the changes in data stored by the software relate to the software issue (section 7.1.6).



7.1.2 Obtaining Capture software

We obtained 16 floppy disks containing various Capture versions from Postmaster 2, as described in section 2.2.5. The disk labels identifying the versions are appended in section 13. On receipt of the disks from Postmaster 2 we took an image (exact copy) of the data held on each disk using Tableau TX1 forensic imaging equipment. Inspection of each disk image showed some disks contained all the files necessary for installation of the Capture software, whilst others included 'upgrade' versions which required the previous version of the software to be installed on the computer. The floppy disks which were identified as containing Installer files are appended in section 13.

In addition, we have also obtained from Postmaster 4, 13 files containing floppy images (.vfd format) which following inspection by Kroll appear to be Capture software installation or version update files (section 2.2.5). The list of files is appended in section 14.

We used software from the disks provided by Postmaster 2 for testing where possible, but the testing of one Capture issue required an installer version of C25 which was not available among the 16 floppy disks provided by Postmaster 2. In this case we used the image of a C25 disk provided to us by Postmaster 4 (see section 7.1.5).

7.1.3 Selection of potential Capture software faults to test

Our review of documentation released by Post Office Limited through various different newsletters and circulars¹⁰³ identified 46 issues related to the Capture software (section 13). We identified which of these issues to test based on the following criteria:

- Did the description of the issue (issue descriptions are summarized in section 12) suggest it could have created an incorrect weekly cash account?
- Did the description of the issue suggest the issue was caused by a fault in the software rather than other potential causes such as a faulty power supply or a lack of guidance or training on the use of the software?
- Was the relevant version of the software available for testing (section 7.1.2)? In some cases, the
 documentation describing the issue did not refer to a specific software version and we had to

 $^{^{103}}$ Including Focus, Captivation, The Subpostmaster, Counter Courier and Counter News.



reference the date of the documentation in relation to our knowledge of the dates on which the new version was released to users by Post Office Limited (section 11).

The application of these criteria produced a list of five identified issues for testing (See TABLE 5). These five issues, based on the descriptions in the source documentation, appeared to present a recurring issue for the users of the software (with the exception of testing scenario 2, which the source documentation appeared to describe as a one-off issue that would occur following an update of the Capture software).

Kroll has not had access to the physical PC hardware (i.e. the Compaq computer that the software would have been installed on as part of the package or any other PC platform that the software may have been installed on). Furthermore, Kroll does not have any information on what other peripherals, including the use of uninterrupted power supply or similar, may have been in use by individual users. Without this, it was not possible to properly analyse the impact of power cuts. In our testing, we have made use of a virtual MS-DOS environment, and causing unintended power failure in a virtual machine is very likely to result in differing outcomes.

We also note that the hardware and operating system software may also have been a factor affecting Capture's operation. Post Office Limited informed potential buyers in June 1992 that the software should run if the computer meets minimum hardware specifications relating to the processor, RAM and hard disk¹⁰⁴. In addition, users were informed in the June 1997 Focus newsletter that Capture was not recommended to be run under the Windows 95 and highlighted two problems reported on a regular basis to the Capture helpdesk¹⁰⁵. Whether running Capture on hardware or operating system software which did not meet Post Office Limited's requirement would result in the Capture software creating incorrect shortfalls is not known.

¹⁰⁴ Capture Business Plan, page 265

¹⁰⁵ Focus, June 1997



TABLE 5: Reported Capture issues identified for testing

Test scenario#	Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source of Issue	Source of software for testing (see section 14)	Issue replicated in testing? See section 7.1.5 for further details
1	C25	C25	Value of Stamp Books, National Insurance Stamps and Discount Wholesale Stamps recorded in the Cash & Stock on Hand screen will be carried forward during the End of Week routine, even if user has requested that stock figures should not be carried forward	Capture C25 upgrade release notes	File provided by Postmaster 4	Yes
2	C35	C35	Remittances Out' (payments made to other offices) recorded on the Thursday, Friday or Saturday before the Capture user upgraded the software from version C25 to version C35 would be not be included in the cash account at the end of the week	Capture C35 upgrade disk software faults	C25 - File provided by Postmaster 4 C35 – disk provided by Postmaster 2	Yes
3	February 1995	C45	QPA errors in Bureau de Change offices due to system automatically reporting volume of transactions to line 034 of Cash Account	Counter News newsletter Thursday 9 February 1995 - Wednesday 15 February 1995	Disk provided by Postmaster 2	No
4	April 1996	C60	When user receives BT stamps in inward remittances, the system will indicate a negative stock anomaly at the end of the week	Focus newsletter, April 1996	Disk provided by Postmaster 2	No
5	C70	C70	Value of Home Help/Care Stamps and Game Licences recorded in the Cash & Stock on Hand screen will be carried forward during the End of Week routine, even if user has requested that stock figures should not be carried forward	Capture C70 installation and release notes	Disk provided by Postmaster 2	Yes



7.1.4 Preparation of the virtual testing environment

The testing approach had the aim of creating a virtual machine which attempts to mimic the computing environment Capture would have been originally installed on, since the original hardware configurations are generally no longer available. The hardware and operating system software requirements are set out in the business case for Capture and communications sent out to sub-postmasters prior to the launch of Capture in 1992¹⁰⁶. The operating system software was specified to be MS-DOS version 5.0 or a later version¹⁰⁷.

In Oracle VM VirtualBox software, a virtual hard disk was created which had a MS-DOS, version 6.22 operating system installed on a virtual computer which had a floppy disk drive (drive A:): and a hard drive (drive C:) available. We mounted the virtual images from the disks collected from Postmaster 2 on to a drive D:, and copied the contents on to a virtual floppy disk (in drive A:). Capture was then installed on the virtual hard disk guided where possible using the installation instructions which had been obtained for several versions of Capture from Postmaster 2.

The testing of one Capture issue (test scenario 2) required an installer version of C25 which was not available among the 16 floppy disks provided by Postmaster 2. In this case we used an image of a C25 disk provided to us by Postmaster 4 (see section 2.4.8).

For test scenario 2, the installed C25 version of the software was required to be updated to C35 during the testing of the scenario. In practice to conduct such an update, the Capture user would have had to insert a floppy disk into the computer with the C35 upgrade before typing commands in MS-DOS to execute the upgrade. To mimic this in the virtual environment, a virtual floppy disk (.IMG) file was created based on the original disk image of the C35 upgrade (labelled on the floppy disk as 'CAPTURE C35 PROVINCIAL'). This was then 'inserted' into the Floppy disk (drive A:) in Oracle VM VirtualBox at the appropriate step in the scenario.

7.1.5 Testing of Capture issues

For each test scenario a script was prepared which set out a series of practical steps for the tester to attempt to replicate the issue using the virtual testing environment set up for the Capture version relevant to the issue. The steps in each script were based on Post Office Limited-issued Capture instruction manuals and release notes obtained from Postmaster 2, the description of the issue in the source

¹⁰⁶ Capture Business Plan, page 5.

¹⁰⁷ Capture Business Plan, page 261.



documentation and our understanding of the use of Capture in the weekly reconciliation process (section 3.2).

7.1.6 Assessing how Capture changed and stored data at each step in the testing scripts

The Capture software was written in the Clipper programming language developed by the Nantucket Corporation (later, Computer Associates). Clipper was released as a Compiler for the dBASE III database management system and enabled the development of standalone database and business applications for MS-DOS. Inspection of the files created by Capture within our virtual testing environment showed the software uses dBase ("DBF" and DBT") database files, and memory ("MEM") files used to store the current state of values and names of all variables that were in the Clipper application memory at the time the file was created, which could then be reloaded later (collectively called "Capture Files").

To gain an initial ¹⁰⁸ understanding of how the Capture Files related to the operation of Capture, we were able to analyse Capture Files from 15 floppy disks. These disks were weekly backups taken from Capture between 1995 and 1999 by Postmaster 14. The files were provided to us by Former employee 2 (section 2.2.3). Examination of the files showed each backup disk included a number of Capture Files. The number of Capture Files varied with floppy disk, with up to 70 files per disk. The total may be related to the version of Capture which generated the files. The Capture Files held on the 15 floppy disks were observed to contain:

- Details of transactions entered by the sub-postmaster.
- Reference data such as the price of postage stamps or other products
- Data related to calculations automatically made by Capture, in addition to other operational information specific to the software

For each test script run, we produced a view of the changes in each Capture File at each step using the following approach:

Kroll.com | Page 64

_

¹⁰⁸ Future analysis of additional backup disks provided by Postmaster 14 may provide more knowledge of how the various files generated by Capture relate to its operation.



- For each step in the test script conducted in the Capture software we took a snapshot of the Capture Files at that step in the script by using the 'Backup data to diskette' option in Capture's 'Special Functions' menu. This produced a floppy disk image file for each step in the test script.
- For each of the Capture Files stored within the floppy disk image file we calculated a MD5 hash value, an electronic 'fingerprint' of the file.
- We then examined changes in the MD5 hash value for each Capture-generated file (an example would be 'CAFIN.dbf') at each step in the test script. A change in the MD5 hash value of a file indicated the file had been changed by the Capture software at that stage in the testing (for example by the addition of more data in the database table or a change to existing data stored in the table).

7.2 Observations

7.2.1 Results of testing

The results of testing are summarised in Table 5. Out of five reported Capture issues examined, Kroll was able to replicate three of the issues within the limited time available for testing.

It is noticeable that for the two issues which could not be replicated (test scenarios 3 and 4), the documentary source did not provide the specific Capture version on which the issue had been identified and the date of the document was used to assume which Capture version was potentially affected.

7.2.1.1 Test scenarios 1 and 5

For test scenarios 1 and 5, the issues described in the source documentation ¹⁰⁹ ¹¹⁰ were replicated during our testing. The source documentation indicates these are two similar issues regarding items recorded in the Cash & Stock on Hand screen in Capture. At the end of the accounting week on a Wednesday, if the option was chosen not to carry stock figures into the next week the software fault occurred such that these items were carried forward, when they shouldn't have been. The two issues occurred in different Capture versions (C25 and C70) and for different stock items (Stamp Books, National Insurance Stamps and Discount Wholesale Stamps for test scenario 1; Home Help/Care Stamps and Game Licences for test scenario 5).

¹⁰⁹ Capture C25 upgrade release notes.

¹¹⁰ Capture C/O installation and release notes.



Examination of the Capture Files at each step of test scenarios 1 and 5 showed that when the Cash & Stock on hand was updated by the user, CAFSTOCK.dbf and its supporting tables specific to different products e.g. STAMP_NI.dbf were also populated. When the end of week routine was run, all the values in the CAFSTOCK file were set to zero (in line with the option chosen by the user not to carry stock figures over into the next week). However, the values of stock in supporting tables such as the table representing National Insurance Stamps STAMP_NI.dbf remained even after the end of the week routine was conducted, explaining why these stock values were still carried forwarded when they shouldn't have been. Once the user had navigated to the relevant sub screens, the CAFSTOCK table was then updated again with the values present in the supporting tables e.g. STAMP_NI.dbf.

7.2.1.2 Test scenario 2

For test scenario 2 the source documentation¹¹¹ was a note by Post Office Limited sent to Capture Users that 'Remittances Out' (payments made to other offices) recorded on the Thursday, Friday or Saturday before the Capture user upgraded the software from version C25 to version C35 would not be transferred across to the cash account at the end of the week. The remediation for users was suggested in Post Office Limited's note "To correct this corruption, you will need to re-enter all figures for those days but DOUBLED. This will result in the 'Daily' column and total showing twice the correct amount but the 'Total for the week' column showing the correct amount".

This issue related to the upgrade of version C25 to C35 was also the focus of testing for Individual 2 (see Allegations described in section 2.3). Our test script simulated a sub-postmaster entering transactions on the Thursday, Friday and Saturday including a remittance out prior to upgrading the software to C35. Once the upgrade was completed, restarting the software, running the end of week routine and checking the cash account showed the remittance out previously entered was now missing and there was a shortfall in the cash account, when there shouldn't have been a shortfall.

We ran an additional test script for test scenario 2 which varied the value and category of the transactions being entered and this also resulted in an incorrect shortfall in the cash account. As part of the same script we then observed the issue persisted in subsequent accounting weeks by following these steps: 1) simulating the sub-postmaster making up the (incorrect) shortfall with their own funds so that the account balanced; 2) Moving forward to the next accounting week and adding another remittance out; 3) Producing the cash account in Capture which reported an (incorrect) shortfall as the remittance out was also not included in the cash account.

¹¹¹ Capture C35 upgrade disk software faults.



Examination of the Capture Files at each step of test scenario 2 showed that when the Remittance Out was updated by the user in Capture, CAFOTDAY.dbf and CAFOUT,dbf were populated. Following the update of Capture to C35 in the testing and the running of the end of the week routine, the CAFOTDAY.dbf retained the data on remittance out transactions previously entered by the user, but CAFOUT.dbf did not retain the data. The Capture software appears to use the data from CAFOUT.dbf, explaining why the remittance out transaction was no longer visible and not used in the calculation of the cash account.

7.2.2 Incorrect weekly cash / stock accounts resulting from software faults

Based on the limited testing Kroll has conducted on the five scenarios described above, the impact of 3 of these issues would have resulted in variance between cash or stock on hand and the cash or stock balance contained in the Capture summary. This is described further with reference to the relevant test scenarios below:

For test scenarios 1 and 5: The reported Capture issue would result in inflated stock figures for certain categories of stock (such as National Insurance Stamps) to be recorded by the software, resulting in lower physical stock on hand when compared to the end of week Capture balance. Although, unlike scenario 2, scenarios 1 and 5 did not result in a "shortfall" figure in the Capture weekly closing process, we understand that this error could have resulted in a discrepancy (i.e. shortage) of physical stock on hand at the end of week.

For test scenario 2: The reported issue of a failure to include the Remittance Out data in the weekly cash account data was demonstrated to result in an incorrect shortfall which arose when the weekly close process was run after an upgrade from C25 to C35. The end of week balance showed a shortfall which was equal in value to the "Remittances Out", indicating that these transactions were not included in the software's calculation of the closing cash on hand. The issue was also shown in testing to persist in subsequent weeks following the upgrade of the Capture software from C25 to C35: Capture would generate incorrect shortfalls until the software was updated to fix the fault.



8 Conclusions

This section provides Kroll's conclusions to the questions raised on our Terms of Reference.

8.1 Approach

As part of Kroll's Terms of Reference, we are required to provide a conclusion based on the available evidence (if necessary, based on the balance of probabilities) as to whether there was a reasonable likelihood that Capture could have incorrectly created shortfalls for sub-postmasters, as claimed.

Kroll has gathered available evidence from a variety of different sources, including former sub-postmasters, current and former employees of Post Office Limited and other sources that provided further contextual information. There have been limitations in the availability of documentation, given events took place around 30 years ago, and the timeliness of information provided to Kroll, such as access to available email and electronic data not being made accessible to Kroll until 21 August 2024.

In determining our conclusions, we have also sought to consider the extent to which we are required to demonstrate that Capture was able to generate shortfalls as claimed. Our role, as dictated by our Terms of Reference, was not to opine on individual cases, but rather to draw upon available evidence and determine whether it was possible that Capture had the capacity to generate shortfalls. In this respect, merely the demonstration of a singular example of Capture generating shortfalls is sufficient for the Terms of Reference. Given the numerous versions of Capture utilised over its period of activity, and the availability of those versions being incomplete, it was not possible to demonstrate each and every Capture version was capable of generating shortfalls to a forensic level during the course of this engagement.

Based on our testing of the Capture software, we have identified that versions of the Capture software resulted in at least two types of calculation errors:

- A "shortfall" on the weekly cash summary calculated during the closing process (as confirmed through testing of scenario 2); and,
- A discrepancy between physical stock on hand and stock values recorded by Capture due to an
 incorrection inflation of stock values by Capture (as confirmed through testing of scenarios 1 and
 5).



8.2 Observations

Five potential software faults were selected for testing from the 46 Capture issues identified from a review of different newsletters and circulars. The selection was based on criteria including: i) whether the available description of the issue suggested it could have created an incorrect weekly cash account; ii) whether the description of the issue suggested the cause was a software fault rather than other potential causes such as a faulty power supply; and iii) whether the relevant version of the software was available for testing (section 7.1.3).

In three of the five faults, Kroll was able to replicate the described issue during testing, which would have resulted in variance between cash or stock on hand, and the cash or stock balance contained in the Capture summary.

This report has sought to outline that numerous controls were in place to identify discrepancies and highlight fixes to known bugs and errors on Capture, including:

- A sample check conducted by Post Office Limited Clients.
- PFD control checks.
- Routine audits.
- The Capture helpline.
- Various circulars and newsletters reporting on Capture issues on a periodic basis.
- The option to revert to manual processes.

However, we observed that there was an acknowledgement, both through internal and external communications undertaken by Post Office Limited during the 1990s, that successive Capture versions had bugs and errors. The severity and impact of bugs and errors reported in Post Office Limited communications varies in materiality, from a minor formatting inconvenience through to misrepresentation of entries (section 6.2.2)

Whilst these bugs and errors did vary in severity, this placed the burden upon sub-postmasters to implement fixes on a regular basis, which varied in complexity. Example fixes required the sub-postmaster to use Capture modules/screens to correct the pricing of stock items, or to enter certain transactions twice. Sub-postmasters were also reliant on communications from Post Office Limited to identify these bugs, errors and subsequent fixes but we have no way of confirming: (i) the timeliness of these circulars being sent from when issues were identified; and (ii) the extent to which all circulars were received and/or read by sub-postmasters (section 5.2.6). As evidenced by testing, bugs and errors existed in multiple versions available to Kroll, including Capture C25, C35 and C70.



Testimony from former Post Office Limited employees shows an expectation by Post Office Limited that sub-postmasters could move back to manual processes if they encountered an issue with Capture. However, this expectation is not reflected in sub-postmasters' testimony showing inconsistent messaging from Post Office Limited around the use of the software and in some cases, sub-postmasters being deterred from stopping their use of the software and reverting to manual production of the weekly accounts (section 5.2.2).

The contextual environment for sub-postmasters should also be considered, specifically the contractual arrangements in force between sub-postmasters and Post Office Limited at the time, which included an obligation to repatriate losses caused through "negligence, carelessness or error" which was understood by sub-postmasters to require them to reimburse any stock or cash losses. Given this external pressure placed upon sub-postmasters, our review has found multiple methods used by sub-postmaster to repatriate losses, which in certain cases, was claimed to have led to suspension, termination and prosecution of sub-postmasters on the basis of theft and false accounting charges. Kroll does not provide comment on whether any convictions arising from sub-postmasters using Capture could be considered unsafe at this time.

Witness testimony gathered during the course of the investigation also demonstrated that an understanding of the resources available to support sub-postmasters was not always consistent, and sub-postmasters often resorted to other means to ensure a reconciliation in their records to account for the discrepancies or shortfalls, including the alteration or misrepresentation of records (thereby implicating them to more serious charges).

Based on our understanding of Post Office Limited's processes at the time, if the relevant branch was selected for audit and the discrepancies calculated by the software were not corrected by error notices for example, any of the three tested scenarios referenced above could have resulted in audit findings and, depending on the size of the discrepancy, possible further steps (such as investigations, suspensions, terminations or prosecutions).

Several sub-postmasters informed Kroll that, although they reported issues with Capture to RNMs, these were not followed up by Post Office Limited or taken into account in audits and investigations. In some cases, these sub-postmasters were subsequently suspended and/or convicted (section 4.2.3). Knowledge of Capture bugs and related issues was not formally shared between the Capture development team and Post Office Limited control functions (for example legal, audit and investigations) (section 4.2.1). Kroll has not identified evidence showing issues with the Capture software resulting from bugs were regularly taken into account by Post Office Limited's audit, investigation and legal teams when conducting their work, based on a review of available Branch Files and interviews with Current Employee 2. Given this, we



consider that, based on available evidence, there was a reasonable likelihood that Capture could have created shortfalls for sub-postmasters.



9 Appendix – Privacy Notice

As part of the engagement, DBT provided Kroll with a privacy notice to enable sub-postmasters to make voluntary disclosures to Kroll. This privacy notice set out how DBT, as a 'data controller', processed the personal data provided directly by sub-postmasters for the purpose of the forensic investigation of Capture, a former Post Office Limited software system. Kroll was DBT's 'data processor' for the purpose of this investigation.

DBT did not hold the relevant information required for this investigation. Sub-postmasters (current or former) who wished to do so would share all relevant information with Kroll directly only. DBT would receive and process relevant information from Kroll only if required to do so to fulfil any obligations that DBT has as a Controller under United Kingdom General Data Protection Regulation. and if required to do so to inform policy decisions should Kroll conclude that there is probable evidence that the Capture system resulted in shortfalls.

DBT, via Kroll, collected information about sub-postmasters' experiences of the Capture system and any relevant information they wish to provide for the investigation.

DBT, via Kroll, collected the following categories of personal data:

- first name(s);
- surname (including any previous names);
- home address (previous and/or current);
- postcode;
- telephone number;
- email address;
- job titles (previous and/or current);
- details about contracts held (or that were held) with Post Office Limited;
- financial information about shortfalls and other losses;



- details about actions taken in relation to shortfalls and other losses;
- complaints made by postmasters about Capture;
- information relating to any criminal or disciplinary proceedings;
- any relevant special category data relating to data subjects;
- any other personal data that sub-postmasters wished to disclose as part of the investigation.

DBT collected this personal data in order to fulfil its public function in commissioning a forensic investigation of the Capture system by its processor, Kroll. The personal data was collected and analysed to inform policy decisions should Kroll conclude that there is probable evidence that the Capture system resulted in shortfalls. Sub-postmasters were not compelled to provide evidence for the purpose of this investigation.

DBT will only retain personal data for as long as necessary to fulfil the purposes we collected it for, including for the purposes of satisfying any legal, accounting, or reporting requirements.

If DBT decide that they need to process your personal data for a reason which is incompatible with the purposes for which we collected it for, DBT will contact subjects to explain why they are doing this and why it is lawful to do so.

To determine the appropriate retention period for personal data, DBT consider the amount, nature, and sensitivity of the personal data, the potential risk of harm from unauthorised use or disclosure of your personal data, the purposes for which we process your personal data and whether we can achieve those purposes through other means, and the applicable legal requirements.

For further information on the Privacy Notice, please contact DBT at Capture@businessandtrade.gov.uk.



10 Appendix - Capture Population Data

TABLE 6: Capture population data according to received documentation

Population data accurate as of	Number of Capture users	Source	Total standard agency branches that year ¹¹²
4 July 1992	12	Capture Business Plan and Performance Analysis 1992	19,141
11 July 1992	33	Capture Business Plan and Performance Analysis 1992	19,141
18 July 1992	41	Capture Business Plan and Performance Analysis 1992	19,141
25 July 1992	53	Capture Business Plan and Performance Analysis 1992	19,141
End of July 1992	33	Letter from an employee in Client Sales at Chesterfield, to colleagues	19,141
1 August 1992	58	Capture Business Plan and Performance Analysis 1992	19,141
8 August 1992	110	Capture Business Plan and Performance Analysis 1992	19,141
15 August 1992	162	Capture Business Plan and Performance Analysis 1992	19,141
22 August 1992	220	Capture Business Plan and Performance Analysis 1992	19,141
29 August 1992	268	Capture Business Plan and Performance Analysis 1992	19,141
End of August 1992	114	Capture Business Plan and Performance Analysis 1992	19,141

¹¹² According to data provided by Post Office Limited.



Population data accurate as of	Number of Capture users	Source	Total standard agency branches that year ¹¹²
5 September 1992	314	Capture Business Plan and Performance Analysis 1992	19,141
26 September 1992	368	Capture Business Plan and Performance Analysis 1992	19,141
3 October 1992	407	Capture Business Plan and Performance Analysis 1992	19,141
10 October 1992	451	Capture Business Plan and Performance Analysis 1992	19,141
17 October 1992	486	Capture Business Plan and Performance Analysis 1992	19,141
31 October 1992	488	Capture Business Plan and Performance Analysis 1992	19,141
October 1992	500+	Counter Courier – January 1993	19,141
7 November 1992	507	Capture Business Plan and Performance Analysis 1992	19,141
14 November 1992	512	Capture Business Plan and Performance Analysis 1992	19,141
21 November 1992	552	Capture Business Plan and Performance Analysis 1992	19,141
28 November 1992	577	Capture Business Plan and Performance Analysis 1992	19,141
March 1993	760	Counter Courier – March 1993	19,041
August 1993	920	Counter Courier – August 1993	19,041
December 1993	1,000	Counter Courier – December 1993	19,041
February 1994	1,200	Counter Courier – February 1994	18,982



Population data accurate as of	Number of Capture users	Source	Total standard agency branches that year ¹¹²
July 1994	1,400	Counter Courier – July 1994	18,982
March 1998	2,500 (copies of C90 update, so assumed users)	Post Office Limited investigation – March 1998	18,407



11 Appendix – Capture Versions

TABLE 7: List of versions of Capture according to received documentation

Version name	Date launched	Features added	Source
C10		-	Post Office Limited
C12	September 1992	-	Capture Business Plan and Performance Analysis 1992
C20		-	Post Office Limited
C25	February 1993	Recording information – quantity field New sub stock screens Local schemes Daily cash book Daily cash locked up Postal orders paid plain paper summary End of week Record of cash, stock, and remittances Fault fixes	Counter News, Thursday 25 February 1993 - Wednesday 3rd March 1993; Capture C25 upgrade release notes
C30	25 March 1993	-	Counter News, 18 March 1993 - 24 March 1993
C35	November 1993	-	Counter News, 4 November 1993 - 10 November 1993
C40	4 March 1994	Cash account changes New functionality or enhancements	Capture C40 upgrade instructions and release notes
C45	(a) 1 July 1994 OR (b) October 1994	Double entry checking System speed Cursor control P&A/Green GIRO summary output Fault fixes	(a) Captivation, June 1994; Focus, April 1995 (b) Capture C45 upgrade instructions and release notes October 1994
C50	22 March 1995	-	Focus, April 1995
Capture II	April 1995	Revised V594 and V570 Print Specifications. Print on the latest DVLA summaries.	Focus, September 1995; Capture II v5 installation and release notes
C60	28 March 1996	New automated payment method	Focus, March 1996



Version name	Date launched	Features added	Source
C65a	-	-	Former employee 2
C65	June 1996	Update to database of stock products and prices to reflect Royal Mail tariff increase	Capture C65 upgrade letter June 1996; Capture C65 release notes
C68	November 1996	Fixes a fault discovered during C70 pre-release testing which affects Capture operation during weeks 39 and 40. Fault is inherent in C65	Capture C68 upgrade letter November 1996
C70	January 1997	Fault fixes	Capture C70 upgrade letter January 1997; Capture C70 installation and release notes
C80	-	-	Post Office Limited and Former employee 2
C90	18 March 1998	Changes to cash account values	Counter News, 19 March 1998 - 25 March 1998
C100	17 March 1999	Changes to cash account values	Counter News, 18 March 1999 - 24 March 1999
C110	-	-	Post Office Limited



12 Appendix – Capture Issues

TABLE 8: List of issues in Capture according to received documentation

TABLE 8: List of issues	TABLE 8: List of issues in Capture according to received documentation			
Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source	
1992 onwards	All	Power cuts impact values shown	Post Office Limited troubleshooting guide	
C12	C12	V594 listing of V10s changing order from that of entry and corresponding mismatch between V594 totals and what is shown on V570 if there is more than one V594	Capture C25 upgrade release notes	
C12	C12	Duplicate V594 and V595 schedule numbers	Capture C25 upgrade release notes	
C12	C12	Double check on pensions regarding two foils of same value but different groups as both being of same group	Capture C25 upgrade release notes	
C12	C12	Girobank rent vouchers summary no longer prints 'Thursday' at the top	Capture C25 upgrade release notes	
C12	C12	Problems following restoration of data and diary entries from back up	Capture Business Plan and Performance Analysis 1992	
November 1992	C12 or C20	System lumps together multiple pension or allowance entries of the same value but of different groups and treats them as all belonging to the lowernumbered group.	Captivation, No.1 November 1992	
November 1992	C12 or C20	Girobank rent summaries always display Thursday at the top instead of the day selected	Captivation, No.1 November 1992	



Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source
November 1992	C12 or C20	Order of MVL summaries changes from that in which they were entered	Captivation, No.1 November 1992
C25	C25	Value of Stamp Books, National Insurance Stamps and Discount Wholesale Stamps recorded in the Cash & Stock on Hand screen will be carried forward during the End of Week routine, even if user has requested that stock figures should not be carried forward	Capture C25 upgrade release notes
C25	C25	For users recording Coventry Cable TV receipts, option to insert the decimal point is not working in the rate field of the input screen	Capture C25 upgrade release notes
C35	C35	Pictorial Aerogrammes are still showing at a unit cost of 44p and need to be upgraded to 45p in Postage Stamp File	Capture C35 upgrade release notes
C35	C35	There is no 50p stamp field in Other Postage	Capture C35 upgrade release notes
C35	C35	There are three extra Guaranteed Delivery Service Envelopes which need to be deleted in Postage Stamp File	Capture C35 upgrade release notes
C35	C35	Remittances Out' (payments made to other offices) recorded on the Thursday, Friday or Saturday before the Capture user upgraded the software from version C25 to version C35 would not be	Capture C35 upgrade disk software faults



Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source
		included in the cash account at the end of the week	
C35	C35	Inaccuracies in 1993 Tariff Increase Software	Counter News, 4 November 1993 - 10 November 1993
March 1994	C35	Sub-postmaster wrote they found errors when adding up totals, which they did not experience when manually balancing	Counter Courier, 1994 – March 1994
October 1993, C35	C35	After loading C35, a sub- postmaster experienced a £75 shortfall caused by corruption of the Remittances Out section	Unidentified newsletter provided by Former Employee 2
June 1994	C40	Error will be generated if the Cash Account is not split into separate pages, perforations removed, and stapled together in the top left corner before dispatch to Chesterfield	Captivation, June 1994
June 1994	C40	If more than 160 BT accounts are recorded on a single day. 40 transactions will be missing from the daily report. The correct figure will be transferred to the Cash Account	Captivation, June 1994
May 1994	C40	General speed of system Operations of pensions and allowances double entry check	Former Employee 3 in The Subpostmaster
December 1994	C45	If there is less than one full column of a subsidiary sheet, the system may miss these and not indicate that another summary sheet is required	Focus, December 1994



Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source
November 1994	C45	Capture does not allow schedules to be closed down other than by filling them up or rolling over to the next week	Counter News, 1994
February 1995	C45	QPA errors in Bureau de Change offices due to system automatically reporting volume of transactions to line 034 of Cash Account	Counter News, Thursday 9 February 1995 - Wednesday 15 February 1995
C50	C50	System does not always amend original value when user amends value in Double Entry Checking	Focus, April 1995
C50	C50	If you only have one transaction and it is by credit card, the value field will not allow a zero entry to be made	Focus, April 1995
C50	C50	For automated payments, the Cash Account does not require volumes to be recorded, however subpostmasters do.	Focus, April 1995
April 1995	C50	DNS client summaries are printing incorrectly	Focus, April 1995
C50	C50	Price of Philatelic Collector's packs is incorrect	Focus, April 1995
C50	C50	Daily report of cheques shows transaction numbers as zero	Capture C50 upgrade letter March 1995
C50	C50	There is only one option available under Green Giros: Print All Final Lists	Capture C50 upgrade letter March 1995
April 1995	C50	Total is not recalculated when amendments are made in checking mode: pension and allowance	Focus, April 1995



Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source
		dockets will be over- or understated	
September 1995	C50 or Capture II	A sub-postmaster experienced an issue where all Girobank outpayments were deleted from the table following a power failure. At the end of the week, two "ghostly transactions that appeared nowhere else" were recorded	Focus, September 1995
April 1996	C60	Payments line 10 ("Automated Products") should not be used or two Cash Account errors will be generated on each occasion of use	Focus, April 1996
April 1996	C60	When user receives BT stamps in inward remittances, system will indicate a negative stock anomaly at the end of the week	Focus, April 1996
June 1996	C65	If user modifies or deletes a transaction from a V594/V595 summary, all subsequent entries will move back one line and summary totals will also be affected. Amended totals will not appear on the amended V570 schedule	Focus, June 1996
C70	C70	Value of Home Help/Care Stamps and Game Licenses recorded in the Cash & Stock on Hand screen will be carried forward during the End of Week routine, even if user has requested that stock	Capture C70 installation and release notes



Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source
		figures should not be carried forward	
C70	C70	Capture will only allow a rate up to £9,999.99 to be recorded	Capture C70 installation and release notes
C70	C70	Under certain circumstances the Sheet Numbers of Girobank Deposit or Withdrawal daily summaries do not run concurrently starting with Sheet 1. Sheet Numbers such as 0 or -1 may also be printed / displayed	Capture C70 installation and release notes
September 1997	C70 or C80	Capture does not allow Schedules to be closed before the end of the Cash Account week unless they are filled up	Counter News, 11 September 1997 - 17 September 1997
July 1998	C90	If user modifies the transaction of a spoilt MVL of nil volume to show a correct registration number, the volume will not automatically default to '1'. if user does not change the volume, the client summaries, Cash Account, and reconciliations will be out by 1	Focus, July 1998
Capture II	Capture II	Data corruption problems (not detailed)	Focus, March 1995
November 1999	C100 or C110	If the system had 'crashed' during the previous week, the computer would include amounts in a balance but not show in on any printouts	Postmaster 2 fax of 16 January 2001
June 1997	All versions	Problems identified with running Capture on the	Focus, June 1997



Date or version stated in source	Assumed version if not stated based on date	Description of issue	Source
		Windows 95 operating system. Running the software on this operating system was stated as "not recommended"	



13 Appendix – Capture Disks collected from Postmaster 2

TABLE 9: Capture disks collected from Postmaster 2 on 19/07/2024

Image File (created by Kroll)	Disk label	Installer version
TD-20240722-001	CAPTURE 11 - VERSION 5	
TD-20240722-002	C45 PROVINCIAL	Installer
TD-20240722-003	C45 PROVINCIAL	Installer
TD-20240722-004	CAPTURE PROVINCIAL	
TD-20240722-005	CAPTURE BACKUP	
TD-20240722-006	CAPTURE MASTER	
TD-20240722-007	CAPTURE RELEASE C100	Installer
TD-20240722-008	CAPTURE C60 RELEASE	Installer
TD-20240722-009	UPGRADE PROVINCIAL C.40	
TD-20240722-010	ROYAL MAIL - SERVICES GUIDE ON DISC	
TD-20240722-011	CAPTURE C90 RELEASE	Installer
TD-20240722-012	CAPTURE C80 RELEASE	Installer
TD-20240722-013	CAPTURE C70 RELEASE	Installer
TD-20240722-014	CAPTURE C35 - UPGRADE PROVINCIAL	
TD-20240722-015	CAPTURE 34714 - VERSION C65A	Installer
TD-20240722-016	CAPTURE 2 BACKUP	



14 Appendix – Image Files collected from Postmaster 4

TABLE 10: Image files collected from Postmaster 4 on 28/06/2024

Image File Capture-C12.vfd Capture-C25.vfd Capture-C35.vfd Capture-C40.vfd Capture-C45.vfd Capture-C50.vfd Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C70.vfd Capture-C90.vfd Capture-C90.vfd	IADEL 10.	image mes conceted	
Capture-C25.vfd Capture-C35.vfd Capture-C40.vfd Capture-C45.vfd Capture-C50.vfd Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C70.vfd Capture-C80.vfd Capture-C80.vfd	Image File		
Capture-C35.vfd Capture-C40.vfd Capture-C45.vfd Capture-C50.vfd Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C70.vfd Capture-C80.vfd Capture-C80.vfd	Capture-C1	12.vfd	
Capture-C40.vfd Capture-C45.vfd Capture-C50.vfd Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C70.vfd Capture-C80.vfd Capture-C80.vfd	Capture-C2	25.vfd	
Capture-C45.vfd Capture-C50.vfd Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C80.vfd Capture-C80.vfd	Capture-C3	35.vfd	
Capture-C50.vfd Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C80.vfd Capture-C80.vfd	Capture-C4	40.vfd	
Capture-C60.vfd Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C80.vfd Capture-C80.vfd	Capture-C4	45.vfd	
Capture-C65a.vfd Capture-C68.vfd Capture-C70.vfd Capture-C80.vfd Capture-C90.vfd	Capture-C5	50.vfd	
Capture-C68.vfd Capture-C70.vfd Capture-C80.vfd Capture-C90.vfd	Capture-C6	50.vfd	
Capture-C70.vfd Capture-C80.vfd Capture-C90.vfd	Capture-C6	65a.vfd	
Capture-C80.vfd Capture-C90.vfd	Capture-C6	58.vfd	
Capture-C90.vfd	Capture-C7	70.vfd	
·	Capture-C8	30.vfd	
Capture-C100.vfd	Capture-C9	90.vfd	
	Capture-C1	100.vfd	

About Kroll

Kroll is the world's premier provider of services and digital products related to governance, risk and transparency. We work with clients across diverse sectors in the areas of valuation, expert services, investigations, cyber security, corporate finance, restructuring, legal and business solutions, data analytics and regulatory compliance. Our firm has nearly 5,000 professionals in 30 countries and territories around the world. For more information, visit www.kroll.com.