

RE: POST OFFICE LTD

PROSECUTIONS – EXPERT EVIDENCE

ADVICE ON THE USE OF EXPERT EVIDENCE RELATING TO THE INTEGRITY OF THE FIJITSU SERVICES LTD HORIZON SYSTEM

1. I am asked to advice Post Office Ltd. on the use of expert evidence in support of prosecutions of allegedly criminal conduct committed by those involved in the delivery of Post Office Ltd. services to the public through sub-post office branches. By and large these allegations relate to misconduct said to have been committed by SPMR's and/or their clerks.
2. This document considers the provision and use of such evidence in past prosecutions and those currently under way. I will deal with future prosecutions separately.

Background

3. Historically the Post Office was a division of the Royal Mail Group (RMG), however Post Office Ltd. (POL) was separated out of the RMG on the 1st April of 2012 and each became separate and unrelated organisations. Prior to separation it was RMG who conducted the prosecution of criminal offences committed by SPMR's and/or their clerks, however post-separation POL assumed the role of prosecutor.
4. In general only three distinct offences are prosecuted by POL: Theft; False Accounting; and Fraud, either by False Representation (ss.1&2, Fraud Act 2006) or by Abuse of Position (ss.1&4). The detection and successful prosecution of such offences is almost

always dependant upon the proper analysis and presentation of Horizon data and accordingly it is imperative that the integrity and operation of the Horizon system is demonstrably robust. In many prosecutions the defence will fall into one or more of the following categories:

- a. The defendant will raise issues attacking Horizon, suggesting in general and often ill-defined terms that the shortfalls giving rise to prosecution are inexplicable and thus must rest with Horizon. Here the defendant does not specify the Horizon failing, he or she merely asserts that because they did as they should, the system itself must be at fault;
 - b. An express assertion that Horizon has failed in some way;
 - c. In admitting Fraud or False Accounting (but NOT theft), that either a. or b. above is true, their culpability being limited to the covering-up of otherwise inexplicable losses rather than revealing what is a genuine (on their account) problem to POL. Here the issue is that of sentence, Judges being required to consider the quantum of losses when determining the appropriate punishment.
 - d. In all three of the scenarios noted above a defendant often also complains of a lack of training on Horizon and/or inadequate customer support.
5. Where a defendant asserts, rightly or wrongly, that Horizon is at fault, it is for the prosecution to demonstrate the integrity of the system and the evidential audit trail derived from Horizon. This is usually accomplished by the serving of expert evidence, detailing:
 - a. The expert's qualifications and standing;
 - b. The purpose and function of the system;
 - c. Such systems as are in place to detect and identify problems, bugs *etc*;

d. And stating in clear terms that:

- where the defence has raised merely a general and unspecified criticism of Horizon, it is not only generally free from error but that it is protected by such systems and security as to prevent error;
- Where the defence has raised specific criticisms, he has considered those matters and has concluded that there is no proper foundation for them.

Duty of an expert witness.

6. Part 33 of the Criminal Procedure Rules 2012 sets out the duties of an expert witness.

That Part provides:

33.2.—

- (1) An expert must help the court to achieve the overriding objective by giving objective, unbiased opinion on matters within his expertise.
- (2) This duty overrides any obligation to the person from whom he receives instructions or by whom he is paid.
- (3) This duty includes an obligation to inform all parties and the court if the expert's opinion changes from that contained in a report served as evidence or given in a statement.

7. Further to the provisions of Part 33, it is also the duty of an expert instructed by the prosecution to act in the cause of justice.¹ Accordingly an expert witness possessed of material which casts doubt upon his opinion is under a duty to disclose the fact to the solicitor instructing him, who in turn has a duty to disclose that material to the defence. This duty exists irrespective of any request for disclosure by the defence. The duty extends to anything which might arguably assist the defence. Moreover, it is a positive duty.

8. Expert evidence is required to be the independent product of the expert, uninfluenced as to form or content by the exigencies of litigation; an expert should provide independent assistance to the court by way of objective unbiased opinion in relation to matters within his expertise and should never assume the role of advocate.² In particular the expert witness should not omit material facts which detract from his opinion. If an expert

¹ *R. v. Ward*, 96 Cr. App. R. 1, CA.

² *R. v. Harris*; *R. v. Rock*; *R. v. Cherry*; *R. v. Faulder* [2006] 1 Cr.App.R. 5,

changes his view on material matters, such change of view should be communicated to the other side and to the court without delay.³

9. Thus an expert witness is not a partisan witness: his function is to assist the court on matters within his area of expertise. He should do so by providing honest opinion evidence based soundly in fact and should not withhold any information which speaks against his opinion. Where information is known to him which undermines his opinion he must inform the prosecutor, who must act in accordance with his disclosure duties.

Prosecution disclosure duties⁴

10. Defendants are entitled to challenge prosecution evidence and this entitlement extends to expert evidence. Thus they are entitled to see the information upon which an expert bases his opinion, together with any material which on one view might undermine the opinion, for such material may assist a defence expert in arriving at an alternative opinion. This is the foundation for the duties of disclosure placed upon the expert witness and prosecution.
11. Accordingly, when prosecuting such cases it is the duty of the prosecutor (POL) to act openly and honestly and to ensure that the evidence it relies upon is itself reliable. He must consider whether or not the prosecution is in possession of, or has access to, any material which "...might reasonably be considered capable of undermining the case for the prosecution ...or of assisting the case for the accused..."⁵ This duty extends to examining any information of which the prosecutor becomes aware (and for these purposes this includes information which Post Office Ltd becomes aware of) so as to determine whether or not that test is met.
12. The prosecutor must, at all times before the conclusion of the case, keep under review the question whether there is any information which must be provided to the defence.⁶ This duty extends to the consideration of material mentioned in paragraph 8 above.

³ *Ibid.*

⁴ See in general, Criminal Procedure and Investigations Act 1996, ss.1-12; Code of Practice thereunder; Protocol for the Control and Management of Unused Material in the Crown Court; and A-G's Guidelines on Disclosure.

⁵ CPIA 1996, ss.3&7

⁶ *Ibid.*, s.7A

13. Disclosure of material which meets the test for disclosure can only be avoided by the obtaining of a Public Interest Immunity certificate from a judge or, ultimately, by stopping the prosecution.

Expert evidence relied upon by POL in prosecuting offences.

14. For many years both RMG and latterly POL has relied upon Dr. Gareth Jenkins for the provision of expert evidence as to the operation and integrity of Horizon. Dr Jenkins describes himself as an employee of Fujitsu Services Ltd. and its predecessor company ICL since 1973. He holds a number of distinguished qualifications in relevant areas. He has worked on the Horizon project since 1996; he is accordingly a leading expert on the operation and integrity of Horizon.
15. Dr. Jenkins has provided many expert statements in support of POL (& RMG) prosecutions; he has negotiated with and arrived at joint conclusions and joint-reports with defence experts⁷ and has attended court so as to evidence on oath in criminal trials.

Example expert statements

16. I have considered the following statements, provided by Dr. Jenkins in the cases mentioned:

	<u>Statement Date</u>	<u>Case</u>	<u>Court</u>
1.	5/10/2012	R. v. B038	Crown Court
2.	27/11/2012	R. v. A064	Crown Court
3.	15/1/2013	R. v. B019	Crown Court
4.	15/1/2013	R. v. A025	Crown Court
4a.	6/3/2013	Further report	
5.	3/4/2013	R. v. A106	Crown Court

⁷ see e.g. the prosecution of A025 Crown Court, February – May 2013

17. I have selected these statements because they both represent recent examples of the evidence being given in support of POL prosecutions by Dr. Jenkins and highlight the situation as asserted by him *after* it became known that there were defects in Horizon which materially affected the presentation of data and the provision of false balance figures.

18. In addition to those statements mentioned at paragraph 15 above, I have also considered:

- a. the draft report of Helen Rose dated 12th June 2013 and dealing with a Horizon issue which arose at the Lepton SPSO on the 4th October 2012.
- b. The Second Sight Interim report.
- c. Instructions provided to me by POL on the 27th/28th June 2013.
- d. Information provided to MS and me in a telephone call with Gareth Jenkins on Friday 28th June 2013.

Common features of Dr. Jenkins' statements

19. All of the statements listed at paragraph 15 above contain a number of common paragraphs. This is unsurprising given that they all relate to the one Horizon system. Those common paragraphs describe: Dr. Jenkins' qualifications and career history; the Horizon system, including time line and business scope; data handling and processing; failure protection and post-failure retrieval; checks and alerts installed to detect and inform of failures, bugs *etc.*; and a declaration that Horizon is accurately recording and processing data. I extract a number of those common paragraphs below:

<u>Location</u>	<u>Extract</u>
Page 1	I am employed by Fujitsu Services Ltd who have been contracted by Post office Ltd to provide the Horizon systems operating in Post Offices around the country. However I understand that my role is to assist the court rather than represent the views of my employers or Post Offices Ltd.
Usually p.9	At this point a check is made that indeed there are no missing or duplicate jsns for any counter and should any be found an alert is raised.
	<div> <i>Note that this could only happen as a result of a bug in the code or by somebody tampering with the data in BRDB and this check is included specifically to check for any such bugs/tampering.</i> </div>
Usually p.11should it not be, then an alert is raised and the basket is discarded and an error response returned to the counter.
	<div> <i>Note that this could only happen as a result of a bug in the code and this check is included specifically to check for any such bugs.</i> </div>
Usually final page.	In summary I would conclude by saying that I fully believe that Horizon will accurately record all data that is submitted to it and correctly account for it.

Individual reports.

20. Statement 1. This statement only contains the common paragraphs referred to in para.18 above.

21. Statement 2. In addition to the common paragraphs previously identified this statement, page 2 addresses issues raised in the Defence Statement served by the defendant. Dr. Jenkins makes the following comments:

- “....I am not aware of the specific allegations regarding missing user information or phantom logs, and so cannot comment on those.”
- “Horizon....is not wholly affected by a bug in one aspect of it”
- “...in those cases where there is a failure, the integrity of the data recorded is maintained and any discrepancies resulting from the failure are restricted to the transactions being processed at the time of failure.....”

22. Statement 3. Contains the common paragraphs. At page 2 Dr. Jenkins states that he understands that in the case of **B019** “,,the integrity of the system has been questioned and this report provides some general information regarding the integrity of Horizon.” The report then reverts to the common paragraphs previously mentioned.

23. Statement 4. Contains the common paragraphs. At page 2 Dr. Jenkins states that he understands that in the case of **A025** “...the integrity of the system has been questioned and this report provides some general information regarding the integrity of Horizon.” The report then reverts to the common paragraphs previously mentioned.

24. Statement 4a. Also refers to the case of **A025** This additional statement deals with a discussion of information contained within Horizon logs and the settlement of shortages centrally or locally. The statement does not deal with any challenge to Horizon integrity.

25. Statement 5. Contains the common paragraphs. At page 2 Dr. Jenkins states that he understands that in the case of **A106** “...the integrity of the system has been

questioned and this report provides some general information regarding the integrity of Horizon.” Dr. Jenkins then reproduces Point 4 of the Defence Statement and answers the criticism contained therein thus:

- “Point 4 (second part) : *He does not have confidence in the Horizon accounting system, or that transactions were accurately recorded.*

This is a contentious statement with nothing to substantiate it. I would say that Horizon does accurately record all transactions that are input into it and these transactions that are the basis of the audit trail described in the remainder of this report.”

The report then reverts to the common paragraphs previously mentioned.

Helen Rose draft report dated 12th June 2013: Lepton SPSO: 4th October 2012

26. This report is based upon a series of email passing between Helen Rose, a POL Security Fraud Analyst. The emails appear to have been sent/received over the period 30th January 2013 to 13th February 2013. The essence of the contact is a ‘question-and-answer’ process between Helen Rose and Dr. Jennings in circumstances where Helen Rose is enquiring into a reversals issue at the Lepton SPSO. I again extract a number of paragraphs:

On 30/1/2013 Dr. Jennings tells Helen Rose that:
“It isn’t clear what failed...”

“...the counter may have rebooted and so perhaps may have crashed in which case the clerk may not have been told exactly what to do..... the system is behaving as it should”

“It is quite easy for the clerk to have made a mistake....”,

In her email of 13/2/2103 Helen Rose says:
“I know you are aware of all the Horizon integrity issues....”

27. Ms. Rose’s ultimate conclusion is that this is not an issue which suggests a failing of Horizon itself; rather it is an issue of data presentation, *i.e.* the problem appears to be that the ARQ logs do not distinguish between system-generated and manual reversals, the answer being to create a new column in the ARQ log to facilitate that distinction. The

report however does allude to Horizon issues: the 30th January email is suggestive of the proposition that Dr. Jennings does not know what went wrong; and the 13th February comment is suggestive of the fact that Dr. Jenkins knows of other Horizon issues.

The Second Sight Interim report

28. In considering this report I only take account of those matters indicating a prior knowledge of Horizon issues. The following paragraphs appear relevant:

- 6.4 In the course of our extensive discussions with POL over the last 12 months, POL has disclosed to Second Sight that, in 2011 and 2012, it had discovered “defects” in Horizon online that had impacted 76 branches. (SSIR published 8/7/2013)
- 6.5 The first defect....impacted 62 branches. It was discovered in September 2010.
- 6.6 The second defect.....affected 14 branches....and generated discrepancies...including ashortfall...and a surplus.....
- 6.7 POL was unaware of this defect until, a year later after its first occurrence in 2011, it re-occurred and an unexplained shortfall was reported by an SPMR.
- 6.8 POL’s initial investigations in 2012 failed to reveal the system defect and, because the cause could not be identified, the amount was written off. Fujitsu looked into the matter early in 2013 and discovered, and then corrected, the defect.

Other sources of information.

29. On Thursday the 27th June Martin Smith of Cartwright King Solicitors was telephoned by POL. There then ensued a number of conversations between MS and senior POL executives. The import of what MS was being told may be summarised thus: he was informed by POL that a report commissioned from Second Sight by Post Office Ltd. and as yet unpublished, indicated that Horizon may not be ‘bug’ free. There was much speculation as to the content of the Second Sight report. It appeared to POL that some within the organisation had been aware of bugs affecting up to 30 offices including some Crown Office branches. Jarnail Singh, head of Criminal Litigation had been unaware and did not know how long POL had known of the existence of the bugs nor indeed who at POL had known.

30. On the 28th June MS and I spoke with Dr. Jenkins, who told us that it was he who had informed the Second Sight Committee of the existence of two bugs which had affected Horizon. Dr. Jennings told us that the extant bug affects Horizon to a limited degree and at specific post office locations only. Bugs have been identified in Horizon which call into question some of the aspects of the way in which it operates. He said that the earlier bug was historic and a patch had been applied to Horizon which had remedied the problem.
31. Subsequent information by emails to MS revealed that there had been identified two bugs affecting Horizon on Line. B14 was the more recent, having only being diagnosed in early 2103. Some remedial work had been undertaken and a systems change is planned for the 8th October.
32. At this point the Helen Rose report had not surfaced.

Discussion

33. The Dr. Jenkins expert statements (see paragraphs 15 to 24 above) all have a similar flavour to them. They all attest to the robustness and integrity of Horizon in express terms (see e.g. my para.18 above “Usually final page” extract).
34. The general import of the statements also leads one to a similar conclusion: Dr. Jenkins tells the reader that failures will only occur “.....*as a result of a bug in the code or by somebody tampering with the data in BRDB and this check is included specifically to check for any such bugs/tampering*” or that a problem can “.....*only happen as a result of a bug in the code and this check is included specifically to check for any such bugs*” but he does not say that any bugs have been identified, either by the checks referred to or otherwise. The inevitable conclusion to which the reader is driven is that “...if that is right, there must be no bugs.”
35. Plainly therefore Dr. Jenkins is attesting to the then integrity and robust nature of Horizon – there is nothing wrong with the system. Unfortunately that was not the case, certainly between the dates spanned by the statements I have extracted here, the 5th October 2012 and the 3rd April 2013.

36. By reason of the matters stated herein, it may reasonably be suggested that the conclusions set out immediately below are established :

- a. Since September 2010 Horizon on Line had suffered at least two defects, or bugs. One appears to have been resolved in early 2011; the other remained extant until at least January 2013 and, on one account, will not be remedied until October 2013.
- b. Dr. Jenkins informed the Second Sight committee of the existence of the two bugs within the 12-months preceding publication of their Interim report. Accordingly Dr. Jenkins knew of the bugs, their history and resolution during the period 5th October 2012 (date of first report reviewed by me – see para.16 above) and the 3rd April 2013 (last reviewed report).
- c. Whilst it is certain that Dr. Jennings was aware of B14 in January 2013, given that the Second Sight committee were informed of the existence of the two bugs within the 12-months preceding publication of their Interim report, it is not unreasonable to infer that he knew of B14 prior to January 2013.
- d. Dr. Jenkins has, at least between January 2013 and 8th July 2013, been aware that, arguably, B14 would remain unresolved until a systems change is planned for the 8th October.
- e. Helen Rose's comment to Dr. Jennings of the 13th February 2013 reinforces the point: "I know you are aware of all the Horizon integrity issues...."
- f. And during the period January/February 2013, Dr. Jennings was dealing with a Horizon problem in circumstances where he was speculating as to what had occurred because it ".....[wa]sn't clear what failed".
- g. No mention is made of any of these Horizon issues in Dr. Jennings' expert witness statements considered in this review – see paragraphs 15 to 24 above. Rather the statements attest to the robustness and integrity of Horizon.

- h. Had the existence of the bugs been disclosed by Dr. Jennings in his expert witness statements then, in relation to any defendant who had raised Horizon issues as part of his/her defence case, that material "...might reasonably be considered capable of undermining the case for the prosecution ...or of assisting the case for the accused...." and would undoubtedly have required disclosure to such a defendant.

Conclusions

37. What does all this mean? In short, it means that Dr. Jennings has not complied with his duties to the court, the prosecution or the defence. It is pertinent to recall the test under which a prosecution expert labours: "*....an expert witness possessed of material which casts doubt upon his opinion is under a duty to disclose the fact to the solicitor instructing him, who in turn has a duty to disclose that material to the defence. The duty extends to anything which might arguably assist the defence. Moreover, it is a positive duty.*"⁸
38. The reasons as to why Dr. Jenkins failed to comply with this duty are beyond the scope of this review. The effects of that failure however must be considered. I advise the following to be the position:
- Dr. Jenkins failed to disclose material known to him but which undermines his expert opinion. This failure is in plain breach of his duty as an expert witness.
 - Accordingly Dr. Jenkins credibility as an expert witness is fatally undermined; he should not be asked to provide expert evidence in any current or future prosecution.
 - Similarly, in those current and on-going cases where Dr. Jenkins has provided an expert witness statement, he should not be called upon to

⁸ *R. v. Ward*, supra. and see paras.6-9 above.

give that evidence, Rather, we should seek a different, independent expert to fulfil that role.

- Notwithstanding that the failure is that of Dr. Jennings and, arguably, of Fujitsu Services Ltd., being his employer, this failure has a profound effect upon POL and POL prosecutions, not least because by reason of Dr. Jenkins' failure, material which should have been disclosed to defendants was not disclosed, thereby placing POL in breach of their duty as a prosecutor.
- By reason of that failure to disclose, there are a number of now convicted defendants to whom the existence of bugs should have been disclosed but was not. Those defendants remain entitled to have disclosure of that material notwithstanding their now convicted status. (I have already advised on the need to conduct a review of all POL prosecutions so as to identify those who ought to have had the material disclosed to them. That review is presently underway.)
- Further, there are also a number of current cases where there has been no disclosure where there ought to have been. Here we must disclose the existence of the bugs to those defendants where the test for disclosure is met.
- Where a convicted defendant or his lawyers consider that the failure to disclose the material reveals an arguable ground of appeal, he may seek the leave of the Court of Appeal to challenge his conviction.

39. In an appropriate case the Court of Appeal will consider whether or not any conviction is unsafe. In so doing they may well inquire into the reasons for Dr. Jenkins' failure to refer to the existence of bugs in his expert witness statements and evidence.