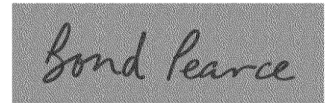


Horizon is free from defects

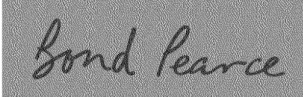
Reports/ Transaction Corrections

	Location of quote	Details of quote	Why is it relevant?
1	Day 2 page 18 paragraphs D, E and F	The sub postmaster can obtain a print out from the computer regarding the balance of the Post Office. They can print out a document to see what the computer thinks they should have in their stock.	This allows the sub postmaster to check any other transactions which have been completed so that they can ensure that the balance is the same as the computer believes it to be.
2	Day 3 page 4 paragraphs E,F and G	The Horizon system keeps a running tally of all transactions and the operator is able to request various reports from the system at any time to display the current state of the accounts. The branch trading account must be signed by the sub postmaster to indicate that it is a true and accurate record of the accounts.	The Horizon system allows the sub postmaster to review any reports and cash held and stock held at any time. Thus the sub postmaster can continually monitor their stock in respect of how much the computer system thinks they have and how much they actually have.
3	Day 3 page 13 paragraphs C and F	Transaction corrections are electronically sent down the system. Once the transaction correction comes down the sub postmaster can either accept the transaction which would effectively be the same as doing the transaction correctly.	As soon as any transactional errors have been identified the Horizon system electronically provides a transaction correction report for the sub postmaster so they can check the transaction in respect of what they have done.
4	Day 3 page 23 paragraphs G and H Day 3 page 40 paragraph D Day 3 page 42 paragraphs D and E Day 3 page 45 paragraph B and C	The sub postmaster is able to pull off a receipt for a particular transaction at that particular time. If a transactional error occurs there will be a telephone call alert which informs the Post Office when the transactional error has been discovered. The sub postmaster has a chance to print off the transaction log for at least six months after the transaction has occurred. There is a number of transaction reports for various transactions which have been completed by the sub postmasters. The sub postmasters are actively encouraged to print off these reports and check them.	POL encourage the sub postmaster to print off the transaction reports in order for them to check transactions which have occurred. They are able to indicate what they are looking for therefore they should be able to find their particular transaction and any errors can be limited or avoided wherever possible.
5	Day 3 page 52 paragraph G	We have looked at how we can reduce the amount of paper in the system both from a green perspective as well as an operation perspective and how we can reduce our operating costs as well.	The Horizon system does not produce a high level of paper documentation. The reason for this is that Post Office understand there is a significant amount of paper used in the Post Office as it is and it would not be helpful to be printing off reams of paper from the Horizon system in respect of transaction logs. The sub postmaster has an ability to print off transaction logs as they wish from the Horizon system.



Horizon is free from defects

6	Day 4 page 29 paragraphs F,G and H	The accounts can be changed by transaction correction if the sub postmaster agrees to the correction. If he or she disputes it then nothing will happen on the account. The sub postmaster can mark it saying "seek evidence" in which the transaction is effectively cancelled out and does not affect the local accounts.	The Horizon system allows any disputed transactions to be fully evidenced by the sub postmaster and POL before they affect the sub postmaster's accounting system. Therefore the sub postmaster is not immediately penalised for any error which has occurred they are able to take the opportunity to have a look at the evidence examine this and the accounts are affected thereafter once the matter has been resolved.
7	Day 5 page 8 paragraphs A and B	Mr Vasarmy indicates that if a loss has been identified you start looking into the system to find out what has happened, you have to go through the whole day's transaction logs to see what could possibly have gone wrong.	This indicates that the sub postmaster does have the ability to search through all of the previous transaction logs to identify where the error has come from. Further the sub postmaster is in a position to chase the business customer in respect of any transaction which could have been incorrect in order to rectify this problem. It shows that the sub postmaster does not have to simply accept all of the losses.
8	Day 5 page 52 paragraphs A and B	Professor McLachan (the independent expert) states that either the sub postmaster can say that they would like a transaction correction to correct my account or anyone within the post office who finds something that doesn't match up can request this transaction correction.	This is of relevance as it indicates that the transaction corrections can be requested by either the sub postmaster or someone within the post office. This is to ensure that the transaction is corrected and evidence is provided to the relevant parties to remedy this.
9	Day 5 page 58 paragraph G	The expert indicates that you are able to obtain a snapshot of the cash positions in respect of payments such as cheques, traveller's cheques, vouchers and stamps for any given trading period.	This indicates that you are able to identify how much stock you have during any given trading period so the sub postmaster is able to check with their own records what stock they actually have and what stock the system believes that they have.
10	Day 6 page 62 paragraphs C and D	A snapshot from Horizon – it tells you how much cash, how much stock or how much stock that each till should have.	The Horizon system allows the sub postmaster to have a snapshot of exactly what their tills should be showing at any given moment. Therefore the sub postmaster has the ability to check their stock against that they physically have in their drawers at any given time. Therefore they can check any errors before they arise.
11	Day 6 pages 10 and 11 Day 6 page 70 paragraph F Day 6 page 156 paragraphs E, F and G Day 7 page 28 paragraph F	(Day 6 pages 10 and 11) Examples of transaction corrections issued. (Day 6 page 70 paragraph F) Evidence shows that Mr Longman issued two transaction corrections relating to Camelot National Lottery to the sub postmaster. "When I asked for more information, a whole bundle	The sub postmaster is able to request transaction correction details from the post office. The post office will then provide a print out from the Horizon system detailing the error and the manner in which it has occurred. The sub postmaster has an opportunity to discuss this with the post office or ask them any questions surrounding this should they wish to. There is no fault with the print outs which are provided by the Horizon system to the sub postmaster. This provides them with all the details in respect of the

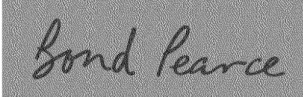


Horizon is free from defects

	came in. You had the evidence, you could have asked them to explain it to you."	transaction in question.
--	---	--------------------------

Recalibration of Horizon computer screen

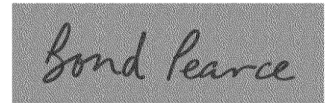
	Location of quote	Details of quote	Why is it relevant?
12	Day 4 page 87 paragraph B and E	There have been independent tests in the screen.	If the screens have been independently tested it is unlikely that the Horizon system will have any defects as there will be no need for an independent individual to side with Post Office on such matters.
13	Day 4 page 137 paragraph A	I think you would have found out a lot earlier in respect of the calibration because if you are regularly using the screen and it is mis-calibrated then you will be hitting the wrong buttons all over the place and you are going to get very confused and you will end up selling the incorrect product.	If the screen happened to be mis-calibrated for any reason the sub postmaster would have identified this at an early stage as it would result in all of the transactions being incorrect and if the sub postmaster still failed to note that a customer was more than likely to have identified this error.
14	Day 7 page 28 paragraph H	In respect of recalibration the staff noticed when any errors were made in respect of touching the wrong buttons. There couldn't have been many mistakes, not enough to make a whole of £115,000. The sub postmaster would notice it and the customer would notice it.	If recalibration was a problem there would have been a significant number of customers and sub postmasters who reported the same error. If recalibration was a real issue then a lot of customers would have received the incorrect products. For example when buying a TV licence they could have received a book of stamps. The fact that the helpline has not had a significant number of calls in respect of this indicates that this is not the case.
15	Day 7 page 73 paragraph C	Various parts of the system are independently validated not all of them because in some instances there isn't a body to do independent validation such as the screens. The expert provided us with guidelines for the Horizon system. This included the design of the screens taking account of people's varying experience of computers.	The Horizon system is independently validated thus if there were any inherent defects they would have been picked up but as yet none have been picked up by the independent validators. The Horizon system had strict guidelines to which it was designed to. If there had been a significant shift from the product which was designed and the product which had been intended to be designed then we would have seen significant changes and alterations made to the Horizon system. However during the period of 1998 to 2006 there were no significant changes made to the Horizon system.
16	Day 7 page 77 paragraph H	The touch screens can shift out of alignment. If that happens and the user becomes aware of it then the screen has to be recalibrated.	If a recalibration of the screen is required it can easily be done by the sub postmaster. The sub postmaster just needs to simply be alert to the fact that in that, each transaction should be checked and verified with the customer. It is not a significant error as it can



Horizon is free from defects

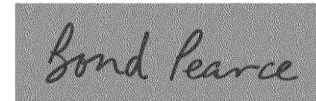
			easily be corrected whilst the customer is still with the sub postmaster.
--	--	--	---

	Location of quote	Details of quote	Why is it relevant?
17	Day 4 page 25 paragraph D,F and G Nominal losses	For every transaction there should be a balancing transaction somewhere as the Post Office system is a double entry system. The system records for every customer a set of transactions of the items that have been purchased and then a similar set of transactions representing the mechanism that has been used to pay for those transactions.	The system used within POL is a double entry system. Therefore indicating that the losses which occur within the Post Office do affect the Post Office business as a whole they are not just nominal losses.
18	Day 2 page 57 paragraph E	With the system when you scan out the system and scan the pouch it automatically scans in the amounts and this automatically goes into the cash.	The Horizon system scans in the barcodes on the pouches of money. This is then inputted into the Horizon system and reconciles the Post Office account. In the sense that if for example £20,000 cash is in the pouch the £20,000 cash using the double entry system goes into the sub postmaster's account.
19	Day 3 page 14 paragraphs F and G	Where the money is being remitted to a cash centre the cash centre would have very detailed photographic evidence of the pouch arriving at the cash centre. They would also have pictures of it being allocated to a particular person, pictures of the person opening the pouch, emptying the pouch and physically checking the pouch.	POL have detailed photographic evidence of any pouches come in and the individuals who are dealing with this. Thus there can be no issues with anybody taking money out of the pouch or putting additional money in the pouch for any reason.
20	Day 3 page 15 paragraphs D,E and G Day 3 page 16 paragraph B Day 3 page 18 paragraph B	The sub postmasters can go in and search by product by individual by time frame or individual stock in order to find the transactions over the period of time that they wish to look for. Through the Horizon system the sub postmaster can search for any transactions which have been completed.	The Horizon system allows the sub postmaster to keep a record of any transactions which have occurred. The sub postmaster has the ability to go back and check anything which they believe may be incorrect at any given point.
21	Day 3 page 20 paragraphs A,C,D Day 3 page 22 paragraphs D and E	The sub postmasters have to enter into the keyboard exactly how much money they have got in each denomination preferably on a daily basis. This will allow the sub postmaster to do till balances. The sub postmaster is able to do a till balance at any point during the day as many times as they would like.	The Horizon system permits the sub postmaster to check the denominations that they have in their tills against the denominations which the computer system believes them to have. Therefore the sub postmaster can continually check the transactions which have been completed in respect of identifying how much money they actually have in their tills.



Horizon is free from defects

22	Day 3 page 24 paragraph E	Many goods have bar codes on them. Every terminal has a bar code reader. If the bar code is not working the number for the product can be entered in separately.	Each product or item has a separate bar code therefore making it easier for the sub postmaster to input data into the system. This therefore limits the room for error in respect of manually entering the product codes.
23	Day 4 page 12 paragraph H Day 4 page 13 paragraphs A and H Day 4 page 14 paragraphs A,C,D and G Day 4 page 15 paragraphs B,D,E and H Day 4 page 16 paragraph B	These quotes relate to the design specification of the Horizon system and the manner in which this has been complied with. The Horizon system was designed to be simple to use, for anybody without any IT experience. The system has a series of icons which have pictures to represent what is going on. The system is clear so you can see exactly what you have typed in and you are able to correct it as necessary. The system has been designed to be used by individuals who do not necessarily have English as their first language. It has also been designed to be used by those with disabilities and hearing and sight strains.	Provides an indication of POL's drivers when designing the Horizon system.
24	Day 4 page 19 paragraph H Day 4 page 21 paragraph G	In Horizon the transactions are "stacked" that is what is showing if a transaction has already taken place with the particular customer. When the session has ended with the particular customer the sub postmaster presses a finish button and then they are given an option for the customer to make the payment.	Each customer's transactions are collectively stacked up together. Therefore making it easier for both the customer and sub postmaster as at the end of each transaction there will be a sum which they either need to collect from the customer or give to the customer. They are then presented with several options of payment from the customer. This ensures that the sub postmaster does not forget or miss a particular transaction which the customer has requested to be completed. It also ensures that the correct amount of money has been given to the customer or taken from the customer in any given transaction.
25	Day 4 page 23 paragraphs E and F	You can effectively key in the amount in pence and the decimal point is there visually but you do not need to actually key it in.	The Horizon system has been designed to simplify matters wherever possible for the sub postmaster to ensure that it can be understood by the majority.
26	Day 4 page 26 paragraphs G and H Day 4 page 27 paragraph A	The Horizon system has a two phase commit technology therefore you can be sure that a particular transaction has either completely been written off or not written at all.	The two phase commit technology permits the sub postmaster to identify if a transaction has been completely written off and therefore not gone through the system or if it has gone through the system. There can be a number of reasons why a transaction does not go through for which the sub postmaster can later examine the transactions logs to identify why this happened. The transaction logs are all available on Horizon and therefore there should be no reason why the sub postmaster does not know why this happened.



Horizon is free from defects

27	Day 4 page 33 paragraph F Day 4 page 37 paragraphs C and E	When pouches are sent to Post Office they have a sticky bar code on the front. The sub postmaster is expected to keep a record of the bar code which is on the front of each pouch. When the money arrives at the Post Office the bar code is read by a bar code reader and if there is a match with how much the sub postmaster says should be in the pouch then it goes directly into the Post Office's account. If the money is short the money is put into a suspense account whilst it is all sorted out.	The Horizon system does not simply take the word of the sub postmaster in respect of how much money is put in a pouch and if any differences do occur the sub postmaster has the opportunity to sort this out whilst the money is in the suspense account.
28	Day 4 page 39 paragraphs E and F	Fastcash – it saves having to key in the whole total. It represents the fact that the entire transaction has been processed by cash and so is like a shortcut to save having to type in the amount of cash into the system again.	This is a manner in which the Horizon system aims to simplify matters for the sub postmaster. It enables them to take a slight shortcut to identify how much money the customer owes the Post Office.
29	Day 4 page 45 paragraphs D and E	The credit card transactions, when they are corrected the only reason that the transaction would have failed is because it is settled in another way either by cheque by the transaction being thrown in the bin or by the transaction being reversed.	Transactions are seen to fail not necessarily due to a defect by the Horizon system but through the fact that they have been reversed, paid by cheque or thrown in the bin by the sub postmaster.
30	Day 4 page 48 paragraph B	If the sub postmaster had left it at that and then restarted the position the computer and everything would have sorted itself out the next day but they compounded the problem by trying to do some further transfers to try and sort the problem out.	This relates to the issue which occurred in Calendar Square. The Horizon system can often correct its own errors by simply being restarted. Often the sub postmasters try to correct the problems themselves. This cannot be seen as a defect of the Horizon system as if the sub postmaster left the system to update itself the problems would automatically be sorted out.
31	Day 4 page 133 paragraph H	An awful lot of testing was going on. They were working 24 hours a day seven days a week.	The Horizon system was independently tested across an extended period of time.
32	Day 5 page 3 paragraphs A and C	The new sub postmaster, Mr Vasarmy, has indicated that there is nothing that would show on the system that there are any problems with it. If there were any problems they were only slight glitches that you wouldn't really have come up in the system.	The new sub postmaster found no system errors with the Horizon system. It is questionable how the previous sub postmaster found such serious problems with the Horizon system which have subsequently disappeared.
33	Day 5 page 4 paragraphs B and H	The new sub postmaster, Mr Vasarmy stated that the only problem that he could really remember with the system was a loose connection. Further he provides a plausible answer to correct one of the errors which could possibly have occurred within the post office.	If the new sub postmaster is able to indicate the manner in which you would rectify a problem then there cannot have been any problem with the training as both would have received the same type of training. Further if a loose cable connection is the only problem which this new sub postmaster has incurred then there is unlikely to have been any serious issue with the Horizon system.

Bond Pearce

Horizon is free from defects

34	Day 5 page 6 paragraphs E and F	Something has come up after a long time after the event. The new sub postmaster Mr Vasarmy indicates that although a transaction has come up after a while, you are able to look in your own records and you can find out the records from the system as the system tells you that you are playing catch up.	The system clearly indicates that you are 'lagging behind' so the sub postmaster is clearly aware that there is some loss which has occurred. The sub postmaster can then look at their own records to try and attempt to identify where the errors have come from or they can request these from the post office.
35	Day 5 page 51 paragraph D	Professor McLachan (the independent expert) indicates that there is no issue with the traveller's cheques in terms of affecting the accounts.	The manner in which travellers cheques are dealt with via the post office do not affect the accounting system.
36	Day 5 page 84 paragraph A	Horizon system is regularly updated with new releases of software and that when the hardware fails it is replaced.	Any errors which are identified within the Horizon system are immediately replaced and the system is rolled out to the other Post Offices. Therefore there was no significant problems with Horizon they would be identified and corrected as soon as possible.
37	Day 6 page 47 paragraph A	The sub postmaster was told that there is no time limit in respect of the training taken.	The training does not require any kind of top up. It is intended for those individuals who are computer illiterate and have had no previous knowledge of computer systems. Therefore indicating that the training is of a simplistic nature as the Horizon system is designed to be accessible to individuals of different knowledge bases.
38	Day 6 page 146 paragraph F	By receiving the money without putting it into Horizon the account system has no idea that the money has been deposited.	The Horizon system is only able to record the amount of money which has been inputted into the system. If there is money which has not been inputted into the system but has come into the post office, the Horizon system cannot be responsible for knowing that that money has been put there as it has not been inputted by the sub postmaster. It is not a defect of Horizon if money is not inputted into the system, it is a user error.
39	Day 7 page 30 paragraph B	Thirteen months of looking through the data from Horizon system and "he didn't find a bean".	Having reviewed 13 months worth of data if there is no significant issue relating to the Horizon system identified then there is unlikely to be one. The expert examined all of these transactions within that thirteen month period and found no evidence of this issue.
40	Day 7 page 75 paragraph C	Fast cash – every transaction error involving fast cash could be resolved by saying that either a cheque was presented or the session was abandoned so that nothing went into the system.	The fast cash button did not cause significant issue if the problems were resolved by either (a) a cheque being presented instead of the failed card or (b) the session was abandoned so that nothing went through the system in respect of these transactions. Therefore indicating that the fast cash button does not have any defects.

Bond Pearce

Horizon is free from defects