

| Ref | POL:Q17472700 | FJ: MI 5103991 |
|---------|---------------|----------------|
| Control | Version: 0.1 | Status: Draft |
| Owner | Steve Bansal | |

MAJOR INCIDENT REPORT

| INCIDENT DETAILS | | | | | | |
|---------------------|--|--|--|--|--|--|
| Incident Summary | Post Office Card Account transactions were unable to complete and a number (approximately 1%) of AP Transactions were affected following the AP Ref Data Monthly update being enabled on Wednesday 1 st February. | | | | | |
| Service Impacted | Between 08:00 and 11:15 on Wednesday 1 st February all Post Office Card Account transactions were unable to complete and a number of AP Transactions were matched to an incorrect client | | | | | |
| Executive Summary | Post Office Card Account transactions and some AP Transactions were affected from 08:00 on Wednesday 1 st February. Due to a problem with a scheduled Reference Data update of monthly AP Ref Data for token IDs. This resulted in the two token IDs being incorrectly mapped, 1980 and 1981 (Highland Council). To resolve the issue Fujitsu identified the fault, produced correcting data in conjunction with the Post Office Reference Data team, and tested and delivered an update to the AP Ref Data. | | | | | |
| | Corrected AP Ref Data was available to Branches from 11:00. Post Office Card Account transactions and the affected AP transactions resumed from approximately 11:15. By 12:30 99% of branches had downloaded the corrected Ref Data. | | | | | |
| | Post Office Ltd provided Reference Data for the monthly AP Ref Data update which included the two Token IDs 1980 and 1981. The Fujitsu Reference Data Team completed a technical validation against the file provided, which was subsequently verified by Post Office Ltd. | | | | | |
| | This was a second iteration of the data as a problem had been identified with the initial data set that had been supplied during validation of the token data. The CTO update was in effect a primary package with an incremental update. | | | | | |
| | Following validation of the data by both Reference Data teams the update was loaded on 26 th January to the live environment with an enablement date of the 1 st February. | | | | | |
| Analysis of Problem | The definition of a magnetic card or barcode within Reference Data includes a number of elements. These elements are essential in defining the token mask which is used to match the set of Reference Data tokens (cards and barcodes) against each swiped card or barcodeso as to determine which client the token applies to, and also what counter functionality is to be invoked. | | | | | |
| | In the case of these tokens defined for 1 st February, an element was missing from one version of the Reference Data for an AP client. As a consequence, any scanned magnetic card or barcode that matched with the rogue token matched to Highland Council as the client instead of being matched to the correct client for that token. This led to an AP transaction being launched for the client associated with the rogue token. Both AP and ETOP clients were affected as in both cases their transactions are launched via a card swipe or barcode read. | | | | | |
| | Evidence to date suggests that Post Office Card Account cards were the only banking cards affected. | | | | | |



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| Root Cause Analysis | Activity to date has been focussed on resolving the issue and minimising the impact to Post Office Ltd and their clients. However the focus of the parallel investigation is the system handling of the incremental package. In addition as the update was validated any variance of the verification rigs to the live environment. | | | |
|---------------------|---|------------------------|--|--|
| Corrective Actions | Fujitsu identified the mismatch on Ref Data and produced a corrected set of Ref Data to load into the BRDB and resolve the issue. As authorised by Post Office Ltd, Fujitsu quarantined the 6831 transactions which were affected to contain the situation and limit the impact to POLSAP and Credence. See below for further actions | | | |
| Date Of Incident | | Time of Service Outage | Time Service Restored | |
| 01/02/2012 | | 08:00 - 11:15 | 11:15 POCA commence 11:30 45% of counters have the fix 12:00 90% of counters have the fix 12:30 99% of counters have the fix | |

| RELATED REFERENCES | | | | |
|--------------------|----------------|--------------------------|--|--|
| Master Incident | Problem Record | No of Linked Incidents | | |
| | | | | |
| | | Action required to Close | | |

| INCIDENT TIMELINE | | | | | | |
|-------------------|-------|--------------------------------------|--|--|--|--|
| Date | Time | Activity | | | | |
| 01/02/12 | 08:00 | Start of Incident | | | | |
| | 08:06 | POA DM paged | | | | |
| | 08:06 | Master call TfS 5104011 | | | | |
| | 08:08 | Fujitsu contact POL (Antonio Jamasb) | | | | |
| | 08:13 | IVR activated (High call volumes) | | | | |



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| | | INCIDENT TIMELINE |
|------|-------|---|
| Date | Time | Activity |
| | 08:14 | POL log call, POL – Q17472700 – Next agreed update 08:30 |
| | 08:30 | Tech Bridge open |
| | 08:33 | Post Office Service Desk informed of Tech bridge and current call volumes (Antonio Jamasb) |
| | 08:46 | Post Office Service Desk informed of current call volumes (Maureen) |
| | 08:55 | SMS sent and Post Office Service Desk informed of current call volumes (Emma |
| | 09:15 | Confirmed normal traffic for A&L and Link |
| | 09:20 | Service Bridge running |
| | 09:21 | SMS sent and Post Office Service Desk informed of current call volumes (Andre |
| | 09:40 | Investigating potential mismatch on Ref Data |
| | 09:40 | SMS sent and Post Office Service Desk informed of current call volumes (Andre |
| | 10:00 | Identified incorrect Ref Data Tokens released on 26/01 with activation date of 01/02, correction is being progressed |
| | 10:00 | SMS sent and Post Office Service Desk informed of current call volumes (Tony) |
| | 10:19 | SMS sent and Post Office Service Desk informed of current call volumes (Julie) |
| | 10:20 | Fix identified and awaiting POL approval for deployment to Live environment |
| | 10:30 | POL approve deployment to Live environment |
| | 10:32 | SMS sent and Post Office Service Desk informed of current call volumes (David) |
| | 10:59 | SMS sent and Post Office Service Desk informed of current call volumes (David) next update agreed 11:30 |
| | 11:00 | Successful deployment of package 2951 into BRDB, Branches now need to pole the BRDB to check for new Ref Data and then process new data at branch level |
| | 11:15 | Post Office Card Account transactions commence |
| | 11:30 | Post Office Card Account transactions increasing, as approximately 45% of branches have processed new Ref Data |
| | 11:30 | SMS sent and Post Office Service Desk informed of current call volumes (Julie), next update agreed 12:00 |
| | 11:39 | No calls queuing |
| | 11:48 | IVR removed |
| | 12:00 | Post Office Card Account transactions higher then monthly average, as approximately 90% of branches have processed new Ref Data |
| | 12:04 | SMS sent and Post Office Service Desk informed of current call volumes (Andre next update agreed 12:30 |
| | 12:30 | Post Office Card Account transactions higher then monthly average, as approximately 99% of branches have processed new Ref Data |
| | 12:34 | SMS sent and Post Office Service Desk informed of current call volumes (Tony) |
| | 16:00 | Joint conference call - discuss impact on POLSAP finance and Credence |



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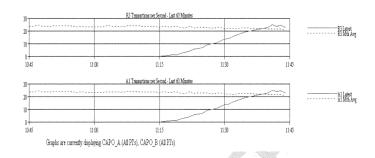
| IMPACT OF INCIDENT | | | | | |
|-------------------------------|---|--|--|--|--|
| Overview of Service Impact | There were two specific service issues that affected 3009 branches; Inability to perform card transactions using Post Office Card Accounts across the entire branch estate ETOP and Automatic Payments transactions mismatched and posted in error to the wrong Automatic Payment client, currently believed to impact up to 3 ETOP and 65 AP Clients | | | | |





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The graph below shows the commencement and steady increase to above monthly average flow rate of the Post Office Card Account transaction levels. NBX Statistics - Transactions



The table below shows the flow of all Network Banking transactions

Overview of Business Impact

| Period start | APS | BURE AU | DCS | EPOSS | ETU | NWB (AL) | NWB (CAPO) | NWB (LINK) |
|--------------|-------|------------|------|--------|------|-------------|---------------|---------------|
| 07:00:00 | 13 | 1 | 3 | 971 | 17 | 9 | | 35 |
| 07:15:00 | 33 | 1 | 13 | 1285 | 9 | 20 | 1 | 49 |
| 07:30:00 | 40 | 20 | 17 | 1713 | 44 | 19 | | 93 |
| 07:45:00 | 53 | 38 | 21 | 3103 | 28 | 28 | | 91 |
| 08:00:00 | 235 | 80 | 48 | 5316 | 31 | 75 | | 176 |
| 08:15:00 | 370 | 87 | 80 | 10438 | 55 | 108 | | 256 |
| 08:30:00 | 1606 | 253 | 415 | 22654 | 86 | 216 | | 805 |
| 08:45:00 | 3069 | 554 | 719 | 43491 | 156 | 394 | | 1406 |
| 09:00:00 | 19361 | 543 | 5181 | 127519 | 584 | 1283 | | 7260 |
| 09:15:00 | 20509 | 851 | 5332 | 136748 | 595 | 1508 | | 6067 |
| 09:30:00 | 19084 | 948 | 4764 | 130645 | 610 | 1493 | 2 | 5255 |
| 09:45:00 | 19441 | 1020 | 4675 | 133330 | 558 | 1427 | 1 | 5163 |
| 10:00:00 | 19674 | 1077 | 4850 | 135483 | 610 | 1529 | | 5142 |
| 10:15:00 | 20537 | 1036 | 4934 | 141501 | 624 | 1536 | | 5257 |
| 10:30:00 | 20575 | 1010 | 5110 | 145445 | 623 | 1514 | | 5387 |
| 10:45:00 | 20975 | 970 | 5337 | 151460 | 637 | 1591 | 3 | 5260 |
| 11:00:00 | 21538 | 974 | 5537 | 153809 | 787 | 1537 | 5 | 5411 |
| 11:15:00 | 22056 | 1103 | 5730 | 163767 | 837 | 1688 | 4550 | 5723 |
| 11:30:00 | 24547 | 1159 | 6143 | 180032 | 1300 | 1885 | 18397 | 6983 |
| 11:45:00 | 25016 | 1054 | 6431 | 185397 | 1439 | 1905 | 22706 | 6955 |
| 12:00:00 | 24263 | 1044 | 6873 | 182591 | 1391 | 1974 | 22815 | 6900 |
| 12:15:00 | 24310 | 1078 | 7529 | 188120 | 1284 | 1734 | 21822 | 6974 |
| 12:30:00 | 23189 | 1159 | 7430 | 176901 | 1202 | 1595 | 19577 | 6504 |
| 12:45:00 | 22022 | 1257 | 7322 | 169495 | 1152 | 1479 | 17219 | 5693 |
| 13:00:00 | 19525 | 1558 | 6606 | 151419 | 944 | 1186 | 14302 | 4707 |



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| ACTIONS | | | | |
|---|---|-------------|-----------------------|-----------------------|
| Actions | Owner | Target Date | Comments / Updates | Peak |
| Fujitsu to load corrected Ref Data | Fujitsu (Pete Thompson) | 01/02/12 | Completed | MSC 043J0332578-02 |
| From joint meeting 01/02/12 16:00: Fujitsu to provide Post Office Ltd with a list of AP Clients, quantities of transactions, and values | Fujitsu (Graham Welsh) | 02/02/12 | Completed | |
| Fujitsu to expire incomplete Ref Data to ensure that all counters which are currently switched off will automatically be forced to download the new version of the Ref Data. | Fujitsu (Pete Thompson) | 01/02/12 | Completed | MSC 043J0332568 |
| Fujitsu to quarantine data. | Fujitsu (Pete Thompson) | 01/02/12 | Completed | MSC 043J033257 |
| From joint meeting 02/02/12 09:30: Fujitsu to provide the following to the Post Office Service Desk • AP Client list • List of complete list of branches affected by this issue • List of ETOP branches | Fujitsu (Graham Welsh) | 02/02/12 | Completed | |
| Resolve data matching issues | Fujitsu and Post Office Ltd Reference Data teams | 10/02/12 | | |
| Further investigation to establish the root cause of the incident | Fujitsu (Steve Bansal) | 08/02/12 | | |
| | | | | |

| CLOSURE | | | | |
|----------------------------|------------------------|--------------------|--|--|
| CP/OCP/CT/CR References | Details of Fix Applied | Comments / Updates | | |
| Date Closed | Fujitsu Approval | POL Approval | | |