

CIO Operations Board Meeting

25 July 2016

Context, Purpose & Principles

Context, Purpose

- We aim to provide effective planning, governance, risk management, insight and challenge to enable the team to execute on our vision and strategy;
- · Focus on outcomes and actual realisation of the benefits of business change and improvement projects;
- Provide greater cost transparency;
- · Share Service Performance & Incidents, regardless of attributable root cause;
- Provide efficient and effective resource, capability and supplier management ensuring we deliver the right skills, in the right place, at the
 right time and at the right cost;
- Design and promote an engaging leadership agenda to inspire our community to continuously create value for our business, customers and partners;
- We have clarity on both strategic direction and the performance management of the function, and how these intersect;
- · We can bring clarity and confidence internally and to our stakeholders that we are maximising quality and value toPost Office;
- We are using the data generated by multiple sources in our function to drive optimal performance management with particular focus on aligning financial management with sourcing strategy and resourcing/capability;
- Risk and audit management is an integral part of our decision-making processes and we have visible controls in place to manage substantive areas of exposure.

Principles

- We will understand how our system is currently/really performing and the opportunities for improvement beyond achieving outcome with current targets;
- We will minimise time and resource overheads throughout- re-use and de-duplication;
- · Governance bodies are focused on decision-making and actions are rigorously followed up;
- · We will only adopt measures and processes that help us improve the work and learn (e.g. lead measures, RCA;
- We have a definition for each metric, the reason for tracking it and the target we are aimingfor;
- We can link each metric back to a business or IT strategicgoal;
- · The management teams will understand and feel a sense of ownership of themodel.



Agenda

| Time | Topic | Topic overview | Owner(s) | Outcome and actions |
|------------------|--|--|----------------------------------|--------------------------------------|
| 09:00 - 09:15 | Update and focus | | Rob Houghton | |
| 09:15 - 10:15 | Service & Performance | Review | Sharon Gilkes | For information Update on Release |
| 10:15 - 11:15 | Vendor Management | Review | Sharon Gilkes | |
| 11:15 - 11:30 | Break | | | |
| 11:30 - 12:30 | Finance | Review | Nick Sambridge | |
| 12:30 - 13:00 | Enterprise Architecture | | Ian Mealings / Chris Barretto | Review and agree action plan |
| 13:00 - 13:30 | Break | | | |
| 13:30 - 14:30 | Change | Portfolio & Resource Management Review | Neil Wilkinson / Ben Cooke | Review and agree action plan |
| 14:30 - 15:30 | Information Security / Risk / Audit | | Julie George / Irina Verkhova | |
| 15:30 - 15:45 | Break | | | |
| 15:45 - 16:30 | Business Partnering | | Andy, Brian, David | |
| 16:30 - 17:00 | People & Communication | Q Performance Review | Joe Arakji, Emma Chaves | Review Leadership & Engagement |
| 17:00 - 17:30 | AOB | | | |

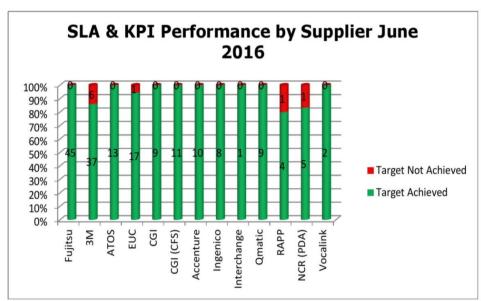


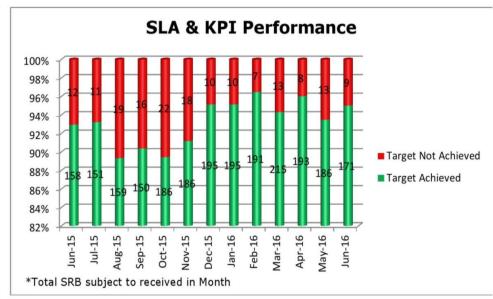


Service & Performance Sharon Gilkes



Service Performance





June & July Highlights

- CDP Encryption Release 7.4 completed.
- Tech Bar launched at Finsbury dials.
- External URL monitoring for partner web sites
- Self-service portal for ticket monitoring due for launch next week.
- GE approval for Horizon Business Continuity plan
- New NCR service contract and much improved Self Service Kiosk service performance
- NCR real time monitoring of Fujitsu/NCR 10Mbit/s datacentre circuit
- Self Service Kiosk Contactless roll out to be completed 3rd August
- Highest AEI Right First Time & Service Restoration performance since October 2015 Student Surge
- Recovery of NT Ingenico device backlog & new stock management system (surplus of 50 devices)
- Branch Bureau Losses Qualified £0.5m losses saving by removing Horizon 'cash settlement' icon
- Decrease and better management of escalated incidents across FSC and HRSC as a result of the Tracker, enforcing more accountability and traction

Q2 priorities

- 3M business case approval for AEI services
- Reschedule the HPE and Computacenter DR Fail over tests
- Tech Bar roll out to other Post Office locations
- End to end monitoring for the CDP and customer analytics via enterprise
- Automation of consistent performance MI across all business areas ('what does good IT look like')
- POLSAP printing solution
- · Service provision for Whitelisting
- Critical care management and reduction of key escalated issues across the supply chain and FSC identifying service gaps and provision of support to plug these gaps
- Plan to Mitigate high risks around Swindon DR capability
- Qualification of Horizon Resilience & volume test rig proposals
- Delivery of 3M Cogent Technology Refresh (AEI desktop PCs) prior to October 2017
- Transition plan for the replacement of End of Life Ingenico paystation. New service model
- Establish Client File & Service Availability KPIs for Banking Framework (effective from Jan 2017)
- Fraud incident Branch Control Voucher client automation
- MoneyGram Post Office IT, Atos, Accenture, Fujitsu and MoneyGram to continue with the collaborative approach in analysing, mitigating and eradicating error code 1204.
- Post Office/Bank of Ireland CIOs engagement on Branch Transformation Technology

Service Satisfaction

| Measure | Targ et SLA | June 2015 | July 2015 | August 2015 | September 2015 | October 2015 | November 2015 | December 2015 | January 2016 | February 2016 | March 2016 | April 2016 | May 2016 | June 2016 |
|-----------------------------|-------------------|-----------|-----------|----------------|-------------------|-----------------|------------------|------------------|-----------------|------------------|---------------|------------|----------|-----------|
| Satisfaction with S'Desk | 80% | 78.41% | 88.33% | 86.81% | 86.62% | 86.22% | 92.40% | 83.97% | 88.59% | 93.05% | 89.77% | 95.83% | 98.43% | 91.81% |
| Total number of Responses | - | 438 | 446 | 418 | 356 | 460 | 330 | 287 | 552 | 403 | 391 | 432 | 254 | 403 |

- · This is a summary of the Atos Service Desk customer satisfaction performance
- The IT Business Partners intend to introduce a quarterly 360 feedback with our internal stakeholders. Scope and design to be developed during August & September

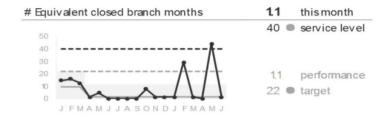
Service risks

| | Application/ Service | Title | Description | Risk rating | | | Mitigation Plan | Action owner | |
|-------------------|---|---|--|-------------|---|---|--|-------------------------|-------------------------|
| CSC | Supply Chain | Lack of Swindon DR capability | Potential loss of Swindon infrastructure and services in an event of a major incident in Swindon due to no ability to recover services hosted there. | HIGH | 4 | 5 | Review of current system and provision of business case. Currently under review | Ben Cooke | Sharon Gilkes |
| Fujitsu | POLSAP | End of Life back office software | Old and EOL software – The support is extended until Jan 2018 | HIGH | 4 | 5 | Upgrade as part of the BOTT | Ben Cooke | Sharon Gilkes |
| Ingenico | Paystation | Current i1500 devices are end of life at March 17 | Business will not be able to accept "at the counter" payments e.g. gas and electricity) via Ingenico devices after March 17 | HIGH | 5 | 4 | Two procurement strategies are being developed (existing device replacement and STRN) | Andy Garner | Sharon Gilkes |
| Fujitsu | Horizon | No regular business continuity testing between primary and secondary Branch Databases | Following recent major incidents involving the Branch Database, there is minimal confidence in our ability to successfully failover to the secondary instance to provide service | HIGH | 5 | 3 | Failover Business Continuity exercise is planned for 3 rd and 10 th September | Andy Garner | Sharon Gilkes |
| Computace nter | EUC Admin | Network Security | Non Post Office devices able to access Post Office information | HIGH | 5 | 4 | Post Office to invest in better control measures for non business devices | David Hargre aves | Chris Barretto |
| 3M | AEI Application Enrolment Identity | EOL BES PC's (End Of Life) | End of life Quanmax PC resulting in service failures | HIGH | 4 | 3 | Pilot underway in 12 branches with upgraded BES PC. | David Hargre aves | David Hargreav es |

Service risks

| | Application/ Service | Title | Description | Risk rating | Impact | | Mitigation Plan | Action owner | |
|---------|---|---|---|-------------|--------|---|--|-----------------|-------------------------|
| ВТ | NBSC Call Mgt. | End of Life of Intelligent Call Management | As a result of the BT ICM platform due to go end of life in December 2016 therefore putting the NBSC service operation at risk of no service | MEDIUM | 3 | 4 | Novation of contract to Verizon | SR | Ben Cooke |
| Fujitsu | Horizon | Tight time frames to deliver the Horizon Gold Key change | Potential service unavailability in a small % of branches from November 2016 as a result of the new Gold Build (VPN Key) of Horizon. | MEDIUM | 3 | 3 | Project plan being closely managed by Atos and on track | Andy Garner | Sharon Gilkes |
| Fujitsu | Branch Pin- Pad | No Pin-Pad maintenance contract | Post Office branches will be unable to perform Pin-Pad services when stock spares become unavailable. This a result of the Pin-Pad engineering service transitioning from Fujitsu to Computacenter and no commercial agreement currently in place with Ingenico | MEDIUM | 4 | 2 | IT vendor management team are negotiating a direct contract award with Ingenico. Due to be complete September 2017 | Andy Garner | Sharon Gilkes |
| 3M | AEI Application Enrolment Identity | Cameras (End Of Life) | Cameras used in the AEI units are now end of life | MEDIUM | 4 | 4 | Post Office to acknowledge and action the Event infrastructure notice which was provided by 3M, as per the contract, in Dec 2015 | Paula Jenner | David Hargre aves |

Service Trends





What happened to service performance?

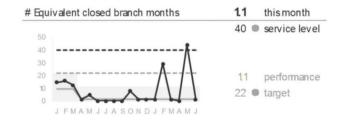
- Strong service performance returned following the 9th May service incident materially impacted our customers and branches
- 0.01% of network availability was lost in June equivalent to 1 branch being closed for the month
- Intermittent branch performance is improving

What was done to improve it?

- A new dedicated Branch Escalations manager proactively investigate the intermittent issues.
- Daily monitoring of the SLA thresholds to ensure tickets which fall into this category are managed accordingly

What is service performance doing now?

- Service Availability and incident management performance has improved in June
- A business continuity plan presented to the GE 18th July. This is to test the failover of the primary and secondary servers and demonstrate the resilience in the overall Horizon Service (target date 3^d September)





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What happened to service performance ?

- Overall NCR system performance continues to be stable.
- Overall Kiosk Service Availability continues to exceed 98% target, however dropped to 98.4% in June following the SSK card payment P1.
- Number of branches with 50% kiosks unavailable spiked w/c 6th and 28th
 June due to initial problems with Contactless upgrade and card payment P1 respectively.
- · Low levels resumed in July.

What was done to improve it?

- Contactless upgrade Programme Non conformance has been eradicated whereby engineer was replacing pinpads as opposed to a remote upgrade
- SSK rebuild backlog has been addressed following the card payment P1 whereby (no remote software upgrades were possible)
- NCR have been provided with access to real time monitoring of the NCR/Fujitsu circuit

What is service performance doing now

- Service levels are much improved with low volume kiosk outages.
- Average resolution time for an SSK has been 8 hours (March-May). This increased to 13 hours in June due to a) incorrect replacement of pinpads instead of remote software upgrade and b) new device build backlog both a consequence of the P1 incident

What happened to service performance

- Overall 3M Cogent system performance is very stable.
- 89% device incidents were resolved within the 6 hour target.
- However the 6 and 10 hour targets of 95% and 100% respectively remain unachievable.

What was done to improve it?

- Student Surge planning includes
- New AEI Desktop PC is tested
- Pilot commences July 1st with 13 devices in branch
- The new device is to be rolled out to prioritised UKVI sites between during August and September prior to Student Surge in October 2016

What is service performance doing now

- 3M Cogent Right First Time has significantly improved in Q3 2015-16. This is due to the improved competency and quality of the new 3rd party technical support desk (Kelway picked up the service in July 2015). This has seen an improvement in March
- 6 hour restoration SLA is much improved over the last 4 months

Ingenico Paystation terminals are working and stocked



What happened to service performance

- Paystation performance is stable with stock unit availability being much improved
- Demand Supply process is embedded with Network providing Ingenico with early visibility to ensure no backlog scenario redevelops
- 265 break fixes were completed in June

What was done to improve it?

- Property Projects have had 214 confirmed as to be returned to Chesterfield
- These are being returned to Ingenico and a healthy surplus of stock has been developed.
- Monthly stock on hand volumes being 'micro managed' by Network and IT teams

What is service performance doing now

 Next Day break fix is 99% against a 95% target however branch failures still need to be flagged to IT to pick up with Ingenico

Forward Schedule – July

| Servcie Impact | Supplier | Detail of Testing | Start Date and Time | End Date and Time | Notes |
|----------------------------------|------------|---|--|---------------------|---|
| lo Service Impact | | | | | |
| lips to or | | | 14040 | | |
| ossible/partial ervice impact | | | July | | |
| outage to Service | | | | | |
| ratage to service | | | | | No impact to branch or live but will be a loss of resilience as this is in the secondary |
| | Fujitsu | IRE19 PIM Testing | 22/07/2016 14:30 | 22/07/2016 21:00 | Datacenter |
| | | R13.05 (CP1653) Horizon Anywhere – Solution Gaps and Deployment into | | | |
| | Fujitsu | Service | 23/07/2016 - 20:00 | 23/07/2016 - 22:00 | Horizon Datacentre Refresh/New Change |
| | | | | | |
| | | | | | AEI service will be impacted during above mentioned window while the circuit migration takes place. |
| AEI ONLY | | | | | In case the migration is not completed by 8am on Sunday, 3Mcogent will be notified |
| | | TFS A2665104 - Planned works on FCN circuit migration to Equinix LD6 | | | immediately so that they can invoke DR on their branch estate to ensure service |
| | Fujitsu | Data centre | 23/07/2016 at 20:00 | 24/07/2016 at 08:00 | continuity. A MBS shall be prepared and sent to forewarn the branches open to trade |
| | | R13.05 (CP1653) Horizon Anywhere – Solution Gaps and Deployment into | | | Horizon Datacentre Refresh/New Change - Hard down to counters Sunday 05:00 – |
| | Fujitsu | Service | 24/07/2016 - 05:00 | 24/07/2016 - 23:00 | 09:00 to BDB databases during service impacting elements of the release |
| | | | | | All services will move back to their primary site - This is not so much an exercise but |
| | | | | | more part of BAU activity. |
| | Vocalink | Cutback of Switching Services from North London to North Yorkshire | 24/07/2016 23:00 | 25/07/2016 06:00 | Definite blips to service as Vocalink FALLBACK FROM London to North Yorks DC. |
| | Fujitsu | R13.05 (CP1653) Horizon Anywhere – Solution Gaps and Deployment into Service | 25/07/2016 - 18:00 | 25/07/2016 - 20:00 | Horizon Datacentre Refresh/New Change |
| | rujitsu | Jervice | 25/07/2010 - 18.00 | 25/07/2010 - 20.00 | Torizon batacentre nerresny New Change |
| | | | | | Customer Contact Portal (CCP) |
| | | | | | Self-Care Portal (SCP) |
| | Fujitsu | Offline Rebuilding of Indexing on Back Office Databases - PRODUCTION | 25/07/2016 - 23:00 | 26/07/2016 - 06:00 | BackOffice (Provisioning, Business Services) |
| | Vocalink / | | | | This is replacement of the router in IRE19 so traffic should not be using this route |
| | Fujitsu | MPSL Router replacement - Vocalink | 26/07/2016 - 23:00 | 27/07/2016 - 06:00 | when replacement of the routers take place. |
| | Vocalink / | | | | This is replacement of the routers in IRE11 - two 2 min blips to transactions which wil |
| | Fujitsu | MPSL Router replacement - Vocalink | 28/07/2016 - 23:00 29/07/2016 - 09:00 | | be successful upon retry. ATM transactions will also be affected but successful on |
| | Fujitsu | Apply Security Patches for July 2016 | 29/07/2016 - 09:00 | 04/08/2016 - 23:59 | First rate files delayed - Blip to influght transactions Testing HP ability to produce POCA cards from an alterntaive site and that they work |
| No service Impact | HP | Card Production | 28/07/2016 | 28/07/2016 | Model office Support Required |
| | | | | | Scheduled deployment of V2 Database patches. To bring servers up to date with |
| | | | | | recommended manufacturers patches on Network Persistent Store / Branch Databas |
| _ | | | | | Servers. All network banking , branch counter activity, AEI, SSK and Paystation |
| 1 | | | | | services will be unavailable on Sunday 31/07/2016 from 04:30 to 10:30. |
| | | | | | First Rate files on Sunday 31st July will be delayed. There will be no loss of data. |
| 5 | | Oracle V2 Ratch Deployment Catchup on Live Service Having AFI | | | |
| Ţ | Fuiitsu | Oracle V2 Patch Deployment Catchup on Live Service - Horizon, AEI (Application Enrolment Identity) & Paystation | 30/07/2016 20:00 | 31/07/2016 10:30 | |
| 10 | r ujitau | (Apprecation amonnent identity) or raystation | 30/07/2010 20:00 | 31/07/201010.30 | |

Forward Schedule - August

Severity 1 & 2 incidents



Volume of Severity 1 & 2 incidents - June 2016

| Business Areas | | Oct | Nov | Dec | Jan | Feb | Mar | April | May | June | Total |
|--------------------|----------------------|-----|-----|-----|-----|-----|-----|-------|-----|------|-------|
| | AEI | 3 | | | | | | 1 | | 1 | 5 |
| Branches | DVLA | | | | | | | | | _ | 0 |
| | Horizon | 2 | | 1 | | 1 | | | 2 | 1 | 7 |
| | Moneygram | 1 | | 3 | | | | | | | 4 |
| | Paystation | | | | | | | 1 | | | 1 |
| | POCA | 1 | | | | | | | | | 1 |
| | SSK | 1 | | | | | | | | 2 | 3 |
| | BT-Telephone | | 1 | | | | | | | | 1 |
| | Lottery | | 1 | 1 | | | | | | | 2 |
| | UKVI | | | | | | | | | 1 | 1 |
| | GlobalPay | | 1 | | | | | | | | 1 |
| | POLSAP | | | | | | | | | | 0 |
| | HPBB Services | 1 | | | | 2 | | | 1 | | 4 |
| Contact Centres | NSBC Servi ces | 1 | | | | | | | | | 1 |
| | Home Phone & | | | | | | | | | -1 | |
| | BroadBand | | 1 | | | | | | | 1 | 2 |
| Finance | Credence/MDM | 3 | 2 | 2 | 1 | | | 1 | 3 | 4 | 16 |
| Finance Service | POCA | | 1 | | | | | | 2 | | 3 |
| Service Centre | PODG - File Transfer | 1 | 1 | | | | | 1 | 1 | | 4 |
| Centre | POLSAP | | | 1 | | | | 1 | | 1 | 3 |
| Mails | Local Collect | | | | | | | | | | 0 |
| Maiis | Track & Trace | | | | | | | | | | 0 |
| Office | SharePoint, Internet | | 2 | | 1 | | | 1 | | | 4 |
| Post Office | WAVE/Top Up | 8 | 6 | 5 | 1 | 1 | 1 | 1 | | | 23 |
| | POLSAP | 2 | 8 | 2 | 1 | | | | | | 13 |
| | Transtrack | 6 | 5 | 1 | | 2 | 2 | 4 | 4 | | 24 |
| | Internet | | 1 | 1 | | | | | | 1 | 3 |
| Supply Chain | Shared Drive | | 1 | | | | | 1 | | | 2 |
| | Site Network/Power | | | | 2 | 1 | | | | 3 | 6 |
| | WCS | | | 1 | | | | 1 | | | 2 |
| Website | CDP | 6 | | | | 2 | | 1 | 1 | 1 | 11 |
| Grand Total | | 36 | 31 | 18 | 6 | 9 | 3 | 14 | 14 | 16 | 147 |

- A total of six (6) Severity 1 and ten (10)
 Severity 2
- Certification expiry issue for internet access identified and resolved, restoring access to the internet for users.
- 3M issued an update to the Kiosks which rolled back a November software release and removed the expired certificate. This restored functionality to all kiosks online, currently 747.
- To restore service to user base NCR removed their management tool which was observed as over utilised, Post this card transactions have been reinstated. Atos Problem Management have been engaged to manage the collation of NCR root cause analysis alongside managing the progression of refunding customers who were incorrectly billed during the outage.
- CGI logged onto a laptop which was still able to connect to the production server and initiated the batch run, which allowed the user to access the application

Problem Management

All branches unable to perform AEI transactions

Issue

 On the 10/06/16 all branches with AEI kiosks were unable to complete AEI transactions including DVLA driving license, UKVI and Security Industry Authority (SIA). The kiosks were reporting an out of service error and the branch devices used to process the transactions were not loading any software.

Root Cause

 3M investigated and identified that a new type of certificate was introduced to AEI in November.
 This certificate had expired and consequently the front-end devices in branches could not communicate with the 3M Central Segment.

Fix

 To restore service 3M in agreement with Post Office rolled back to a previous software version prior to the introduction of the expired certificate (4.4.2), however this was the incorrect version and introduced an issue which could have prevented DVLA transactions from working. 3M sourced a fix and the estate was reconfigured on 4.4.21 following successful testing.

Status

 The RCA for the incident has been published to POL. 3M have identified a number of actions as a result, these will focus on exactly why the certificate expired in the first instance and prevention of future occurrences. These actions will be progressed under Problem Record P9148716.

Multiple branches reporting Horizon counters going offline

Issue

During the afternoon of 09/06/2016 1500 branches were unable to trade for a period of 4 – 10 minutes due to a Network router failure. The impacted branches automatically connected to an alternative resilient router within minutes.

Root Cause

Failure of the LNS router

The device suffered a software crash.

Analysis has identified no abnormal errors or hardware faults. The resilience design is that the sessions connect via alternative devices. This device has a history of being reliable and will be operated and checked for a period before sessions are reintroduced.

 Dropped Broadband sessions on LNS router

As a result of the initial LNS crash and the below configuration error sessions were imperfectly load balanced so the network needed to redistribute the load. This process causes a brief interruption to the affected branches.

Authentication issues

A route authentication error affecting a third LNS caused it not to have a resilient authentication path following the initial LNS crash. The error was corrected.

Fix

 Resilient backup took over service. Router was removed and tested extensively prior to re-introduction.

Status

RCA Published and actions completed.

MoneyGram Service Timeouts

Issue

 Latency seen within the MoneyGram network continues to result in end users in branch raising incidents to the Atos Service Desk. At periods of high latency within the MoneyGram domain transactions timeout resulting in a 1204 error code being displayed on the Horizon counter.

Root Cause

MoneyGram made a number of changes within their domain which increased the time taken for a transaction to complete. They have since tried to improve the efficiency of their network to limit the impact at times of high bandwidth utilization.

Investigations continue to identify where in the transaction journey the 1204 error code is generated.

Fix

MoneyGram have implemented a number of solutions in order to balance the traffic across their networks to reduce timeouts. Long-term fixes include an infrastructure upgrade and will be put in place during the upcoming months.

Status

 A conference call was held on 28/06/2016 with Fujitsu, Accenture, MoneyGram and POL present. Investigations continue and a further conference call has been scheduled to take place 12/07/2016.