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| **TO:** | Members of Southwark Council |
| **FROM:** | Capita Executive |
| **DATE:** | 18th December 2013 |
| **REF:** | OSCMeeting – CustomerService Centre at Queens Road Three |

This briefing is in response to an Overview Scrutiny Committee Meeting request on 2nd December 2013.

## PROFILE: CUSTOMER SERVICE CENTRE

Southwark Council's Customer Service Centre (CSC or call centre) provides a year round (24x7x365) operation to the public, supporting a range of critical services to its citizens.
The call centre was relocated to a new site at Lugard Rd, SE15 2HP (also known as Queens Road 3 / QR3) that occupies the entire ground floor, with 120 seat capacity for call handling agents operating during the core hours of 08:00 to 18:00. There continue to be approximately 24 agents operating outside of the core hour's period.

Capita was responsible for the implementation of the office IT infrastructure. In particular, a new telephony solution was designed and procured that could be extended to a small number of other Council locations that are running localised operations. Principle among these was a section of the first floor at 160 Tooley Street (around 40-60 agents) delivering Revenues and Benefits telephone services.

Throughout the migration, the implementation of new IT, and the ongoing operation of this site and its services Capita have recognised the importance of this customer facing function. Accordingly this critical service is marked as a key service priority in the circumstances of service disruptions.

## INCIDENTS AND REMEDIATION

The following is an account of three significant service impacting events that have affected the main CSC location at Queens Road 3 since the migration.

| **(1)    SERVICE INTERRUPTION - 30TH JULY 2013  3 HOURS 13 MINUTES** | |
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| **Incident** | **Issue:**Users experienced an interruption to service with a loss of Citrix connectivity and loss of telephony for 60 users for 3 hrs 13 minutes (RMS Ref XG301279) <br><br> **Impact:**No access for a group of users to citrix and business applications and the ability to receive and make telephone calls. |
| **Analysis** | The key reason for service impact was a failure of one of the Virgin Media circuits that provides network connectivity services for QR3. <br><br> Virgin Media reported the issue caused by a faulty card which kept rebooting incurring downtime for all that connected through it. <br><br> This incident also highlighted a configuration error within the network switches that failed to initiate a failover circuit - designed to absorb all activity and maintain business as usual whilst the initial circuit is out of operation. Due to the configuration error, only half of the QR3 connections were operating. |
| **Remediation** | **Virgin Media remediation activity: t**he replacement of the faulty hardware. <br><br> **Capitaremediation activity for the Wide Area Network infrastructure:** Settings were reconfigured and the failure error was replicated so it could be tested and confirm that the recovery design was effective. This formal change was implemented to add circuit resiliency to QR3 and this was implement on the 10th August 2013. |

| (2) | SERVICE INTERRUPTION –23<sup>RD</sup> JULY 2013  6 HOURS 16 MINUTES |
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| **Incident** | **Issue**:  Corporate Contact Centre based at Queens Road 3 unable to receive external calls.  Incident reported as 'all phone lines have gone down'<br><br>**Impact**: Reduced productivity at the site in the delivery services to the public. |
| **Analysis** | A call was logged on the 23/07/13 for the Corporate Contact Centre based at Queens Road 3. Investigations commenced with Avaya and BT followed by referral to Capita local engineer.  From investigations it transpired that these servers were incorrectly included in the server patching to achieve PSN accreditation.This caused these key servers to go off line. Server SAB AACC1 services stopped and should have failed over to AACC2, this did not complete resulting in the service disruption. |
| **Remediation** | Once the cause of the service disruption was identified the following remediation activities were progressed<br><br>•     Third Party Sabio connected remotely to bring the server AACC1 back on line to restore service.<br><br>•     A full review of the patching cycle was completed and shared with the Third Party<br><br>•     A full check against the inventory of assets deployed to deliver the Avaya Telephony Service at QR3 concluded to prevent this re-occurring and the patching checklists updated<br><br>•     Resilience of the load balancing between AACC1 and AACC2 referred to Sabio for investigation.<br><br>•     Support documentation updated to avoid re-occurrence. |

| (3) | SERVICE INTERRUPTION –IT PERFORMANCE ISSUES |
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| **Incident** | **Issue**:  Users at the site experienced extended login times to Citrix and slow response when opening applications, often in excess of 30 minutes, which impacts their ability to deliver a service to the public.<br><br>**Impact**: Reduced productivity at the site in the delivery services to the public. |
| **Analysis** | Review of IT Service Desk calls confirmed increased volumes of user Citrix related calls and highlighted some re-occurring user issues.<br><br>Floor walkers were deployed at some LBS sites who observed the user experience first-hand. |
| **Remediation** | Capita commissioned a 3<sup>rd</sup> party review of the Citrix environment which identified a number of recommendations. Capita deployed a dedicated team working solely on |

investigating each of the recommendations to identify which changes should be implemented to improve the user experience.

- Identified an Internet Explorer v8.0 bug which was patched and rectified

- Load balanced the Citrix server farm estate to share the user community across the available servers in a dynamic controlled manner.

- The network was investigated and a switch setting was updated to increase the throughput.

- It was identified that users were launching multiple sessions as a result of the frustration of the delays in response which was compounding the issue. This facility was disabled.

- Commissioned an external review of storage and identified a number of files needing to be purged which in turn increased performance.

The actions above have been acknowledged to have stabilised the Citrix user experience moving it from ~30-40 min logins to sub 3 mins, and continue to monitor the situation.

On the 12th Dec 2013 a business led user experience sample was conducted involving a number of business areas / users. The results showed a range of 33 seconds to 4 minutes with an average time of 1 minute 38 seconds.

Additional areas for improvement have been identified and are being assessed / progressed through the change management process :-

- Users' login scripts – these scripts determine the access permissions to the London Borough of Southwark closed network and to designated applications. These scripts have been in existence for many years and have accumulated commands that have become obsolete but still run unnecessarily as part of the script.

- Users' profile size - the size of the profile can impact the login time. The contents of the User profiles warranted a review to assess what was currently relevant and which elements could be removed to reduce the volume.

- Profile location – Profiles are stored on designated hardware. In peak periods of login this hardware has shown high levels of utilisation and its available resources are limited.

| (4) SERVICE INTERRUPTION – IWORLD HOUSING PERFORMANCE ISSUES | |
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| Incident | **Issue**: The users at QR3 experience a number of different issues with Iworld Housing resulting in multiple incidents being logged to the Service Desk. These range from slowness to full outages and the inability to launch the application at all. From looking at the incidents it is clear that a number of these incidents are related to Citrix faults with delivering the application. <br><br> **Impact**: Reduced productivity at the site in the delivery services to the public. |
| Analysis | There are several root causes to the outages/performance issues at QR3. <br><br> Issues with backup timings have been found to cause slowness.. |

| | Issues with 'Stuck threads' within the application database also cause slowness and eventually service disruption.<br><br>Issues with 'Spinning processes' on the Iworld back end also cause slowness and service disruption.<br><br>The general issue relating to the delivery of applications over the Citrix environment are common to the site and remediation is under the wider improvement work. |
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| **Remediation** | **Stuck threads** – Northgate advised CSIS to update the version of Java on the Iworld live server to combat this issue, the work was carried out in the test environment first, then moved through to the live production server. This upgrade did not resolve the issue. Northgate have since provided a further potential fix relating to a change within the Oracle table configuration but this is currently under review.Once all parties are in agreement this is the correct approach the work will be scheduled.<br><br>**Spinning processes** – The root cause investigation resides with Northgate to provide a permanent fix. Capita have developed a permanent workaround to automatically 'Kill' spinning (redundant) processes, with the work to implement scheduled w/c 13 January.<br><br>**Backup routines** –Schedule of work being prepared to submit a change to amend the backup routine to avoid key service hours during the early hours.<br><br>**Ongoing Review** – Work continues with both Northgate and Capita to improve the application performance. |

| **(5)  SERVICE INTERRUPTION – SOUTHWARK.GOV.UK** |
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| **Incident** | **Issue**:  The users at QR3 experience a number of access issues to Southwark.gov.uk website resulting in multiple incidents being logged to the Service Desk.<br><br>**Impact**: Reduced productivity at the site in the delivery services to the public and reduce access for the general public. |
| **Analysis** | There are several root causes to the outages/performance issues at QR3.<br><br>Issues with external links provisioned by Virgin Media where hardware faults have impacted referred to above in item 1.<br><br>Issues with slow performance when accessing the web, heighted in September resulting in a requirement to upgrade the websense solution.<br><br>Issue at the Datacentre where a dislodged cable resulted in service disruption. |
| **Remediation** | **Internet Access** – In September 2013 due to internet access grinding to a halt a decision was reached to implement an upgrade to the websense solution that manages internet access. Whilst there was some remediation work post the upgrade to stabilise the implementation, internet access was improved. |

**Datacentre –** Recently a dislodge cable caused a service outage of 7hrs 26 minutes. The Capita Network Support raised a call with the 3rd Party Vendor Vtesse as the outside interface to public-facing router was down.

The Vendor Vtesse had identified the root cause as a dislodged cable (which was stored within a 'locked cabinet' at the Datacentre). This cabling issue was rectified by the Vendor. Recommendations for improvement to monitoring and provide resilience for this connection are in hand; Capita has commissioned a full review of network single points of failure which will be completed during February and undertaking a review of the 3rd party contract with Vtesse

**Ongoing Review –** Capita continue to monitor, investigate and respond to internet / website related issues.

## CURRENT STATUS

Recognising the level of criticality of the service being provisioned from QR3, and in addition to the remediation plans already in progress, Capita is involved with regular reviews with key stakeholders at the site, namely Patrick Smith, Catherine Spence and LangaNcayiyana.

We work closely with individuals on site, with the ISDS team and our own experts and other providers, to investigate, understand, and document key concerns and work collaboratively to improve the service. Where necessary problem records are raised to identify repeat incidents and target investigations with all parties to identify a permanent fix, work around or record a known error.

A Capita engineer is also available on a daily basis at QR3 to deal with incidents, and this has been since contract commencement.

Collectively our primary aim is to improve the response times and sustain the overall service performance of the existing Citrix estate, whilst in parallel we are developing a new Citrix platform due to be released in 2014 as part of the Core-Enabling Programme