

Finance & Resources Committee 20th November 2007

HPC Partial Disaster Recovery invocations 7th & 13th September 2007

Executive summary and recommendations

Introduction

Partial Disaster Recovery / Business Continuity Management incidents in September 2007

Two incidents caused by external forces took place in September, resulting in partial loss of services to registrants, applicants, and stakeholders; plus internal employees.

The complete invocation the DR plan and switch to external data storage was not required in either case.

Decision

The Committee is requested to note the document. No decision is required.

Background information

Loss of a power “phase” in the Kennington Power supply , 7th September 2007.

The local power supply in Kennington was upset by contractors working in the street, resulting in the loss of a phase of the power supply to HPC and other nearby premises. The immediate impact at HPC was partial loss of lighting and power in the Park House stairwell, 2nd floor Park House, and some air conditioning failure in Park House.

The Emergency lighting kicked in immediately in the stairwell. Some impacted PC’s and telephones were moved around in the remaining “powered” parts of Park House and Stannary Street buildings to allow some of the 2nd floor registrations advisors to continue working on phone and computer. Some “paper work”, filing etc activities were carried out by other employees.

Ultimately as the Emergency lighting batteries in the Park House stairwell powered down after approximately 3 hours it was decided to shut down that part of the building in its entirety for safety reasons. The remaining parts of the office closed at the usual time.

The online register was not affected directly.

At approximately 21:40hrs RD (Roy Dunn) received a call at home indicating that the connectivity to our Internet Service Provider Star from Park House was down. As this was probably related to power being shut down for reconnection of the missing phase, RD did not return to the office that night, but decided to check next morning if services were up again.

The reconnection of power tripped multiple breakers in Park House so they needed to be manually reset. RD reset these on Saturday.

RD restarted key servers and Tyrone Goulbourne (TG) dialled in from home to restart some applications and services related to LISA.

Errors relating to the external disk store were required to be corrected, by running various repair processes. This took place on Sunday with RD & TG on site. All services were repaired and running by Sunday evening.

Loss of Telephony to outside world due to BT fault 13th September 2007.

Telephone lines to the HPC Park House site were reported as down for approximately 4 hours on Thursday 13th September from 10am.

An initial investigation by the IT team could not find any cause. The telephone support company attached to our equipment and could not determine any internal cause. This indicate that the cause was likely to be external.

The issue was caused by contractors cutting through HPC's lines between the BT exchange on Kennington Park Road and Park House. BT took approximately 4 hours to rectify the broken lines once it had been determined that the fault was external.

Internet connectivity was maintained during the outage.

BT provided a message to our incoming lines, indicating that an external fault was causing disruption to our phone service. There was also the option of re-directing to an analogue line. However this is unlikely to have been able to cope with the call volume. BT offered to have calls redirected to a remote call centre provided by themselves, but this was declined.

A message was placed on the HPC website to indicate external problems were causing failure of the telephone lines.

The repair was completed within the SLA with BT.

We could consider upgrading the SLA for 1 hour response and 1 hour fix but cost is likely to be prohibitive. Investigation will be carried out.

Data processing including ICR of renewals could continue, and email response was possible. The online register was active throughout the downtime.

Lessons learned.

- The continuing vulnerability of street delivered services to HPC is an ongoing concern. Some mitigation is in place, with an alternate power source coming into the HPC buildings via Stannary Street, however major power outage in Kennington will still require invocation of the full DR plan and decamping for employees to the DR offices in Uxbridge.
- Minor power problems can be mitigated for a short period by moving key employees around the buildings as is indicated in the DR plan scenarios. However, we continue to have difficulties predicting the total down time and severity once an incident occurs.
- Even though allowing the production server to power down via the UPS has allowed LISA register services to restart automatically in the past, this can cause minor delays to restoration of IT services when the power supply resumes.

UPS (Uninterruptible Power Supply) scripting will thus be utilised to allow a complete automated and controlled shut down. The downside is that physical access to the building and server room is required to boot up the LISA system, which will delay restart under some invocation scenarios.

Resource implications

No immediate impacts

Financial implications

None

Appendices

None

Date of paper

12th October 2007