

**Timeline IT outage - 26 November 2020**

**02:21:** One of the six nodes on the Council's Hypergrid system that hosts many of its IT systems, failed resulting in several virtual servers going offline. Systems affected included telephony, email, Forcepoint email filtering system, HR21 personnel and payroll system, the corporate SQL database server and the corporate file server as well as support services including the network access control system, DHCP and the certificate server.

**07:45:** The Hypergrid system is designed to support single node outage and IT staff commenced the process of restarting the systems that were offline according to standard operating procedures.

**08:00:** Senior TSO issue noted with signing on noted one of the cluster nodes was down. Also detected a separate issue with Microsoft Exchange.

**08:15:** Systems were back online. IT staff began to investigate the outage.

**09:55:** A call placed with Trustmarque by Help Desk Team to obtain support from Cloudsphere to further investigate the failed node and assist with the recovery process.

**10:25:** A separate issue with one of the Microsoft Exchange databases was also under investigation by the Technical Support Team. A call was raised with Microsoft, a response was received at 10:50 and the issue was resolved by 11:22.

**11:01:** A support session with Cloudsphere commenced and IT staff provided remote access to the Hypergrid management platform. It was determined that a forced close down and a restart of the failed node would be required. This was successful but the management software indicated that a check disk would need to be run. The engineer did not believe that this would affect the operational nodes. However, the whole system went down once the process commenced.

**11:53:** Cloudsphere were contacted to inform them that the whole cluster was down.

**12:12:** An IT Senior Technical Support Officer joined a further support call with the Cloudsphere engineer who apologised but stressed that they could not cancel the process without incurring data loss.

**12:59:** Email was sent from the Senior TSO to Head of IT and Technical Support Manager (IT staff are on Exchange Online therefore unaffected by outage) explaining the mistake made by the Cloudsphere engineer.

**14:51:** An SMS message was sent to around 75% staff and all members from the Director of Finance & Transformation, via Esendex, to inform of the outage. Use of the preferred Gov Notify system, and following our existing DR procedures, was deemed unsuitable in a partial system failure scenario due to the risk of conflict between the still operational authentication system on site and the issues that would be created by running up the offsite DR copy. The IT Development Manager and her team continued investigation into resolving issues with this process.

**15:48:** Recovery of the Hypergrid system was reported to be at 99%, reported this to Cloudsphere via email.

**15:55:** A further support session was set up with the Cloudsphere engineer. While bringing the storage back online issues were encountered requiring the re-run of some recovery processes. A second Cloudsphere engineer joined the support session.

**16:04:** The IT Development Team successfully completed their work to provide a temporary solution to the Gov Notify issue. An SMS message was sent to staff and Members via Gov Notify to update on the service disruption and estimated recovery time.

**18:41:** Telephony, email and Ebase forms systems fully operational. Help Desk Team released quarantined email from Forcepoint.

**20:23:** All systems checked and fully operational.