

TONBRIDGE & MALLING BOROUGH COUNCIL
FINANCE, INNOVATION and PROPERTY ADVISORY BOARD

06 January 2021

Report of the Director of Finance and Transformation

Part 1- Public

Matters for Information

1 BUSINESS CONTINUITY INCIDENT - IT DISASTER RECOVERY

An information report providing Members with a record of the issues arising from the IT disruption for part of the day on 26 November 2020.

1.1 Introduction

1.1.1 The Council's IT systems suffered a major outage on Thursday 26 November 2020 due to a node failure in the Council's Hypergrid system that hosts many of our IT systems. This had the result of impacting multiple services.

1.1.2 The detailed timeline of the incident is set out in **[Annex 1]** for Members' information.

1.1.3 Members will note that the most significant period of disruption spanned the period from circa 11:00 hours to approx. 18:30 affecting staff, Members and customers in varying degrees.

1.1.4 It will be noted from the timeline that the initial problem, which had been generally contained, was exacerbated by the action of a third party during the remedial work.

1.2 Lessons learned

1.2.1 The technical architecture of the system is designed to withstand such single node failures, as it has done on a number of occurrences in the recent past.

1.2.2 The primary reason for this unplanned service outage suffered during business hours was due to an error caused by the third-party maintenance engineer during the remedial work.

1.2.3 Staff access to the SMS messaging system (Gov Notify) required manual intervention from IT staff during this partial system outage.

1.2.4 A formal arrangement is needed with a neighbouring council for incoming telephone calls to be switched over during an outage. This is being taken forward

by our Customer Services team with the assistance of the Business Continuity/Emergency planning team.

1.3 Mitigative actions taken

- 1.3.1 IT Services have implemented procedural changes and will not initiate support sessions with Cloudsphere during working hours unless there is a complete outage or other overriding business need.
- 1.3.2 Cloudsphere have already implemented procedural changes when dealing with TMBC to ensure that any future recovery actions are scheduled out of core business hours.
- 1.3.3 We have modified our DR procedures for the Gov Notify system, and the access to our DR server, to cater for both partial failure as well as full site failure to ensure that SMS messages to staff and Members can be sent promptly in any future outage, and DR information can be accessed easily.
- 1.3.4 IT Services will document procedures and provide training as necessary to the Emergency Planning Team, Management Team, Duty Co-Ordinators, Duty Officers and Media & Comms for the use of the Gov Notify system.

1.4 Business Continuity Impacts

- 1.4.1 The business impact of this outage was on some (but not all) of our core IT systems, telephony and data sets. The Council's public facing web sites and Northgate Revenues and Benefits systems are hosted on separate hardware and were therefore unaffected, similarly the Council's cloud hosted systems including the Adelante payments system, Teams, Exchange Online, M365 Apps, and Northgate Citizen Access systems were unaffected and remained operational.
- 1.4.2 Telephone calls were diverted to Sevenoaks District Council to ensure that in-calling customers were advised of the service outage. There was a delay in being able to do this due to agreement being needed from relevant officers at Sevenoaks first. This is the first time we have encountered a delay in securing the agreement of SDC to take our calls, and they have been accommodating on the earlier occasions this year. The issue is being picked up with a view to formulating a formal "mutual-aid" agreement as set out in para 1.2.4.

1.5 Legal Implications

- 1.5.1 The Council did not suffer any data losses during this outage. Contractually, Cloudsphere provide specialist maintenance and support to their Hypergrid platform with a Service Level Agreement of 24 x 7 x 4 guarantee. Their response was within this SLA. Hence, this outage does not breach the agreed maintenance contract.

1.5.2 Similar outages have occurred during the last four years with recovery actions being scheduled to run in a pre-agreed maintenance session. On this occasion we were not offered the opportunity to make such an arrangement as it was deemed unnecessary by the engineer in question. Following the outage, we expressed our concerns, and we requested a statement from Cloudsphere. They apologised and admitted that “the engineer made an assessment error in recommending the node restart will not have any impact” and “the restart during working hours could have been avoided and the engineer should have notified and requested for a downtime accordingly as a followed practice in past with TMBC”. Cloudsphere stated that they would put further checks in place for the future so that such incidents can be avoided.

1.6 Financial and Value for Money Considerations

1.6.1 A complaint has been raised with the supplier and dependent upon the response, a formal claim for compensation may be made.

1.7 Risk Assessment

1.7.1 Access to the system is only available to Cloudsphere by invitation from IT Services and is physically enabled as and when required into an open session which we monitor.

1.7.2 Cloudsphere have no access to our data, and only given access to the management platform and operating system software.

1.7.3 Following incidents such as these, business continuity ‘post-event’ meetings are held in order to learn from the incident and introduce any new mitigation measures.

1.7.4 The Council and its staff are reliant on IT systems for the delivery of services. In addition, with the promotion of digitally enabled services to the public, it is imperative that the availability of the systems involved are maintained at a higher level around the clock.

1.7.5 In turn we are also reliant on the goodwill of staff across the Council to work ‘out of normal hours’ to ensure that services are able to be restored and run efficiently.

1.7.6 As the reliance on IT systems becomes even greater, opportunities are being explored to mitigate risks further – for example by assessing greater use of cloud services in line with the IT and Digital Strategy. Members of the General Purpose Committee considered the resource base within IT Services having regard to the need for adequate resilience, and accordingly approved a new structure with adjusted job descriptions and additional posts. The new structure comes into effect on 1 January 2021, and we are in the final stages of making the appointments into the roles.

1.8 Policy Considerations

1.8.1 Business Continuity/Resilience

1.8.2 Human Resources

1.8.3 Communications

1.8.4 Customer Contact

Background papers:

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Nil

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