



NATIONAL  
ARCHIVES

OFFICE of  
INSPECTOR GENERAL

Date : October 13, 2011

Reply to  
Attn of : Office of Inspector General (OIG)

Subject : Management Letter No. 12-01, Network Outage

To : David S. Ferriero, Archivist of the United States (N)

On September 13, 2011 NARA experienced an internet outage from a cut fiber-optic cable lasting approximately 32 hours and significantly affecting NARA's operations. During that time, NARA staff were not able to access home and shared drives, email, the Internet, and numerous critical applications needed to perform their jobs. In addition, NARA's customers were not able to access agency services because the outage affected NARA's external websites as well. This Management Letter brings two separate issues to your attention discovered as a result of this outage; NARA has no failover Internet connection, and NARA's continuity of operations (COOP) site may not be able to independently operate if there is an incident at AII.

NARA does not have a failover Internet connection to restore Internet and other services within a timely manner. According to the Executive for Business Support Services, when NARA implemented the Trusted Internet Connection (TIC) the Internet was no longer provided by a separate telecommunications circuit into one or more of our facilities. Instead it is provided through the MPLS wide area network (WAN) which is provided and managed by a service provider. According to the service provider, if NARA had diversity (i.e. dual access) in the network, the outage would have been prevented. The service provider reported they are looking into a diversity option.

NARA officials overseeing the network architecture should have known the design of the network created a single point of failure, and taken action to address this risk before NARA's mission and business capabilities were impacted. Under the TIC initiative, the Office of Management and Budget approved two internet connections for NARA. The original planned implementation of TIC was to have two connections: one at AII and one in St. Louis. However, NARA only has one connection. Thus this outage was not a result of the TIC initiative, but of faulty implementation. One of the findings in our Audit of the TIC at NARA (OIG Audit Report 11-17) was that NARA officials relied on a contractor to determine the requirements for NARA's environment. This reliance was misplaced, and should not have been endorsed by NARA officials.

During this outage NARA did not implement their network disaster recovery plan or use the COOP site. NARANet operations should be able to be restored through the COOP site. However, according to the Executive for Business Support Services, implementation of the COOP site would not have restored services to staff and systems at AI and AII because the COOP site relies on the MPLS WAN connection which was severed during this event. While it is not possible to prevent all incidents, NARA could have limited the impact of this event by designing and implementing resiliency into the network.

Finally, the COOP site is supposed to be able to independently function should there be an incident at NARA's primary locations, including AII. The day-to-day functioning of most of NARANet's functionality at the COOP site is completely dependent on equipment housed at AII. The technical experts at the COOP site stated they believed the right equipment was in place to theoretically restore needed files and run an independent system. However, this independent system for the COOP site has never been fully tested or stood up. Furthermore, NARA has no policies or procedures in place for how such an activation would occur. Should an event at AII happen right now requiring independent COOP activation, the technical experts at the COOP site would not be able to timely establish an independent IT system with the needed functionality.

The OIG plans to perform an audit of NARA's network architecture and an audit of NARA's COOP activities during FY 2012 which will focus on these two areas in more detail. If you have any questions concerning the information presented in this Management Letter, please contact me at (301) 837-1532.



Paul Brachfeld  
Inspector General