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General Accounting Office  
Washington, D.C. 20548

Accounting and Information  
Management Division

B-282829.1

June 16, 1999

The Honorable David J. Barram  
Administrator, General Services Administration

Subject: GSA's Effort to Develop Year 2000 Business Continuity and  
Contingency Plans for Telecommunications Systems

Dear Mr. Barram:

On March 25, 1999, we met with General Service Administration (GSA) Year 2000 program officials to discuss the status of GSA's efforts to ensure that the telecommunications systems it manages for the federal government are Year 2000 compliant. During this meeting, we highlighted several suggestions to enhance GSA's business continuity and contingency plans for telecommunications. The purpose of this letter is to summarize these suggestions and the actions GSA Year 2000 officials agreed to take in response.

**Background**

As you know, GSA provides, among other services, voice, data, and video telecommunications systems to federal agencies both directly and through contracts with local and long-distance telecommunications vendors. These services support a wide range of critical federal operations, including revenue collections, benefit payments, and automated customer service operations. In addition to managing contracts with service providers for long-distance communications, local communications, wireless communications, and paging services, GSA is responsible for 423 telecommunications systems—156 of these are directly managed by GSA and 267 are vendor-owned and controlled.<sup>1</sup> All of these systems are vulnerable to Year 2000 problems that could result in network disruptions or even a complete loss of communications links. For example, Year 2000 problems could disrupt IRS' ability to receive and process electronic tax refunds and the Health Care Finance Administration's ability to make electronic Medicare payments.

<sup>1</sup>Specifically, GSA directly manages 156 Private Branch Exchanges (PBX) on government premises and manages contracts for Central Exchange (Centrex) services at 267 sites. PBX telephone systems are owned and operated by an organization that switches calls between users on local lines while allowing users to share a certain number of external phone lines. Centrex is a service offered by local telephone companies in which facilities at the telephone company's central (local) office are offered to business users so that they do not need to purchase their own PBX.

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As of May 1999, GSA reported that Year 2000 fixes had been completed on 153 of the 156 systems (98 percent) directly managed by GSA. GSA has also reported that it has obtained commitment letters from vendors stating that their systems will be renovated and tested by the end of 1999. GSA is in the process of verifying vendor-certified systems either by observing vendor tests or by observing independent tests carried out at other government agencies. GSA also included requirements in recently awarded FTS 2001<sup>2</sup> contracts that obligate the contractor to provide Year 2000 compliant hardware, software, and equipment.

### **GSA Has Completed a Business Continuity and Contingency Plan for Telecommunications Systems**

In September 1998, GSA completed a business continuity and contingency plan for its telecommunications systems. Because unforeseen network problems could cause widespread disruptions in many important federal operations and GSA is relying on third party testing to ensure that its telecommunications services will not suffer Year 2000-related impairments, it is vital that GSA develop effective continuity plans and that it work with its federal agency customers to ensure that they are fully aware of GSA's contingency strategies, priorities, and implementation modes.

According to GSA Year 2000 program officials, GSA has been following our Business Continuity and Contingency Planning guide,<sup>3</sup> which provides a conceptual framework for managing the risk of potential Year 2000-induced disruptions to operations and incorporates best practices in contingency planning and disaster recovery. Our guide describes a structured approach for (1) initiating a business contingency project, (2) assessing the potential impact of mission-critical failures on agency core business processes, (3) identifying and documenting contingency plans and implementation modes, and (4) validating the business continuity strategy. It recommends that agencies develop a business continuity plan consisting of a set of contingency plans with a single plan for each core business area and infrastructure component (e.g., power and electricity). Each plan should provide a description of the resources, staff roles, procedures, and timetables needed for its implementation.

### **Suggestions for Enhancing Business Continuity and Contingency Planning**

In our discussions with GSA Year 2000 program officials, we made several suggestions for enhancing their business continuity and contingency plan.

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<sup>2</sup>FTS 2001 is a nonmandatory use contract designed to serve as the federal government's primary source of long-distance telecommunications services, including worldwide long-distance, voice, data, and other optional services.

<sup>3</sup>Year 2000 Computing Crisis: Business Continuity and Contingency Planning (GAO/AIMD-10.1.19). Issued as an exposure draft in March 1998; issued in final in August 1998.

First, in developing its business continuity and contingency plan, GSA did not work with its customers to ensure that customers' business continuity and planning tasks and activities are fully coordinated with GSA's plans. GSA customer agencies are at risk for a wide range of disruptions in their mission-critical operations, including breakdowns in automated customer service operations, loss of access to key databases and program management functions, and even a complete loss of communications links. To ensure that its own plans can be implemented quickly and effectively, GSA should make sure that its customer agencies are fully aware of its strategy and priorities and that they know what their own responsibilities are during network disruptions. Also, by sharing its contingency plans with agencies, GSA could obtain input from customers on the effectiveness of the contingency strategies and priorities. Further, in coordinating its contingency plans with agencies, GSA could be sharing with its customers its information on known telecommunications service risks, enabling those customers to plan accordingly. In commenting on a draft of this report, GSA officials acknowledged that they did not contact customers at the start of their contingency planning effort, but that they fully intended to involve customers in that effort through the regional plans.

Second, while GSA's plan anticipated a total loss of federal telecommunications services, it did not anticipate the possibility of partial losses<sup>4</sup> in service, which is more likely to occur. Considering partial losses in service is important because it may require different recovery priorities and timing.

Third, GSA did not incorporate the contingency plans of its regional offices, which play a critical role in providing telecommunications services to federal agencies. The regional role would be particularly important in the event of geographically confined outages, which, as noted above, were not anticipated in the overall plans. At the time of our review, the regions were still in the process of developing their continuity and contingency plans and were not expected to be done until June 1999. In commenting on a draft of this report, GSA officials stated that although regional contingency plans were not yet available, regions were provided the opportunity to contribute to the overall plan during the drafting phase.

GSA officials told us that they did not work with customers or address a partial loss scenario in developing the contingency and continuity plan because they wanted to complete the plan in time for GSA regions to use it as a guide in developing their own plans. However, they agreed that the plan would be more effective if it addressed partial losses and if customers were aware of GSA's own plan. GSA officials stated that they would work with customers in developing coordinated business continuity and contingency plans and that they would develop a strategy of action addressing the possibility of partial loss of telecommunications services. They also agreed to incorporate the regional plans into the headquarters plan.

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<sup>4</sup>A partial loss of service could be one or more sites experiencing a year 2000-related service degradation of performance.

The actions that GSA's officials agreed to take should strengthen GSA's business continuity and contingency planning strategy. It will be important for GSA to quickly implement them to allow enough time to ensure that continuity and contingency plans are practical and cost effective. Therefore, within 30 days of the date of this letter, we would appreciate receiving a written statement on the status of GSA's effort to (1) coordinate contingency and continuity planning efforts with customers, (2) address the possibility of partial losses of services, and (3) incorporate the plans of regional offices.

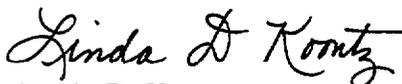
At a June 1, 1999, meeting to obtain oral agency comments on a draft of this letter, the GSA CIO and Year 2000 officials generally agreed with the information presented. We have incorporated their comments where appropriate.

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During the course of our work, we reviewed GSA's renovation plan, system validation plan, continuity and contingency plan, OMB quarterly reports, Inspector General reports, GSA contract language (warranty clauses), and vendor certification letters as well as Year 2000 assessments of the Network Reliability and Interoperability Council. We also attended GSA meetings on telecommunications Year 2000 issues and spoke with Year 2000 program officials from GSA headquarters and three regional offices. We conducted our work from January 1999 through April 1999 in Washington, D.C., New York, New York, and Kansas City, Missouri, in accordance with generally accepted government auditing standards.

We are sending copies of this letter today to the Honorable Fred Thompson, Chairman, and the Honorable Joseph Lieberman, Ranking Minority Member, Senate Committee on Governmental Affairs, and to the Honorable Dan Burton, Chairman, and the Honorable Henry Waxman, Ranking Minority Member, House Committee on Government Reform. We are also sending a copy to the Honorable Jacob Lew, Director, Office of Management and Budget. If you have any questions regarding this report, please contact me or Kevin Conway, Assistant Director, at (202) 512-6240.

Sincerely yours,



Linda D. Koontz  
Associate Director, Governmentwide and Defense  
Information Systems

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