

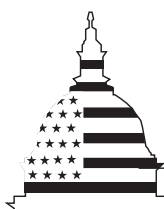
GAO

Report to the Special Committee on the  
Year 2000 Technology Problem

October 1999

YEAR 2000  
COMPUTING  
CHALLENGE

DEA Has Developed  
Plans and Established  
Controls for Business  
Continuity Planning



G A O

Accountability \* Integrity \* Reliability



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## Abbreviations

|      |                                              |
|------|----------------------------------------------|
| DEA  | Drug Enforcement Administration              |
| IT   | information technology                       |
| BCCP | Business Continuity and Contingency Planning |

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**United States General Accounting Office**  
**Washington, D.C. 20548**

**Accounting and Information  
Management Division**

B-282158

October 14, 1999

The Honorable Robert F. Bennett  
Chairman  
The Honorable Christopher J. Dodd  
Vice Chairman  
Senate Special Committee on the Year 2000 Technology Problem  
United States Senate

Despite an organization's best efforts to remediate its mission-critical systems, core business processes may still be disrupted by Year 2000-induced failures and errors in internal systems, business partners' systems, or public infrastructure systems such as power, water, transportation, and telecommunications systems. Contingency plans for continuity of business operations help mitigate the risks and impacts associated with unexpected internal and uncontrollable external system failures.

At your request, we determined (1) the status of and plans for completing the Drug Enforcement Administration's (DEA) contingency planning for continuity of operations and (2) whether DEA's contingency planning efforts satisfy the key processes described in our business continuity and contingency planning guide.<sup>1</sup> On July 21, 1999, we briefed your office on these matters. This report summarizes and updates the information presented in the briefing. The briefing slides are presented in appendix I. Details of our objectives, scope, and methodology are in appendix II. We performed our work from March through July 1999 in accordance with generally accepted government auditing standards. We updated the status of DEA's development of its business continuity plans through August 1999.

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<sup>1</sup>*Year 2000 Computing Crisis: Business Continuity and Contingency Planning* (GAO/AIMD-10.1.19, August 1998).

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## Results In Brief

DEA has managed its business continuity planning efforts in accordance with the structures and processes recommended by our business continuity and contingency planning guide and it has made progress toward completing Year 2000 business continuity plans. DEA plans to complete development of its business continuity plans by early September 1999 and to test them by the end of November 1999. DEA's development of its plans is about 4 months later than our April 30, 1999, recommended date and its testing milestone is 2 months behind our recommended date of September 30, 1999.<sup>2</sup>

While progress has been made, DEA is, nevertheless running late, and still has many important tasks to complete and its plans for completing these tasks leave little time to address any schedule slippage. Therefore, it is important that DEA's leadership continues to monitor its business continuity planning efforts to ensure that any deviations from plans are identified and that corrective actions are taken immediately to ensure that this very important Year 2000 risk mitigation process is completed on time.

DEA officials commented on a draft of the briefing slides and agreed with our findings and conclusions.

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## Background

DEA's mission is to enforce the controlled substances laws and regulations of the United States, to bring to the criminal and civil justice systems organizations and individuals involved in the growing, manufacture, or distribution of controlled substances, and to recommend and support programs aimed at reducing the availability of illicit controlled substances. For purposes of business continuity planning, DEA has defined six core business processes:

- Investigations of regional, national, and international drug cases;
- Tracking information on domestically cultivated and manufactured illegal drugs;
- Enforcement of the country's drug laws;
- Regulation and control of the distribution of controlled substances;
- Management of human resource issues such as payroll, health, staffing, and training; and

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<sup>2</sup>*Year 2000 Computing Crisis: Readiness Improving, But Much Work Remains to Avoid Major Disruptions* (GAO/T-AIMD-99-50, January 1999).

- Financial management of payroll, bills paying, and ordering of supplies.

To carry out its responsibilities, DEA depends extensively on information technology (IT) systems. For example, DEA uses the Narcotics and Dangerous Drugs Information System, which includes information on people, businesses, vessels, and selected airfields of interest to support its investigation process. In addition, DEA uses the Automation of Reports and Consolidated Orders System to track the sales and purchases of illegal drugs between manufacturers, distributors, and the retail sector (e.g., practitioners, hospitals, and pharmacies).

DEA has been working to address the Year 2000 problem with its critical IT systems. Under the leadership of its Year 2000 executive, DEA identified 38 mission-critical IT systems. DEA reported that all its mission-critical IT systems were Year 2000 compliant as of March 1999.

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## DEA Has Limited Time Remaining to Complete Important Business Continuity Planning Tasks

To ensure that agencies have sufficient time to develop, test, and finalize business continuity plans, we recommended that agencies develop their business continuity plans by April 30, 1999, and test them by September 30, 1999. This allows sufficient time for agencies to evaluate whether individual contingency plans are capable of providing the level of support needed to their core business processes and whether the plan can be implemented within a specified period of time.

DEA had made progress towards developing and testing its business continuity plans; however, its efforts are running late and its schedule and milestones leave limited time to complete many important tasks. DEA plans to complete the development of its business continuity plans by early September 1999 and to test them by the end of November 1999, which is 4 months and 2 months later, respectively, than we recommended.

In March 1999, DEA's Year 2000 Program Office briefed the headquarters and field divisions on DEA's Year 2000 business continuity and contingency planning strategy and milestones for preparing draft business continuity plans, reviewing and revising the plans, and testing the plans. As of July 1999, DEA had met most of the milestones identified in its strategy. For example, DEA's field and headquarters divisions began submitting draft plans in May, and in June, the Business Continuity and Contingency Planning (BCCP) Task Force began reviewing the draft plans to identify needed improvements and best practices. In addition, contractors, system owners, and users have begun validating and testing system-level

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contingency plans and the Year 2000 Program Office is currently developing plans and schedules for the agencywide rehearsal of the business continuity plans.

While DEA has made progress towards developing and testing its business continuity plans, it still has many important testing activities to complete in about 4 months before the century date change. For example, as of July 1999, DEA had not validated its business continuity strategy; defined, documented, and reviewed test plans; prepared test schedules and test scenarios; validated the functional capability of each contingency plan; rehearsed business resumption teams to ensure that each team member is familiar with procedures, roles, and responsibilities; and updated business continuity plans based upon lessons learned, then retesting them, if necessary. Such a challenging list of tasks and only about 4 months remaining leaves DEA limited time for addressing problems, such as schedule slippage or delayed delivery of resources needed to implement contingencies, which could arise.

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## DEA Has Satisfied or Has Plans to Satisfy Most Key Processes For Business Continuity Planning

Our business continuity and contingency planning guide provides a four-phased structured approach for business continuity planning—initiation, business impact analysis, contingency planning, and testing. Each phase includes several key processes to be completed within that phase. DEA has satisfied or has plans to satisfy most of these key processes.

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### DEA Has Satisfied the Key Processes in the Initiation Phase

According to our contingency planning guide, effective initiation of a business continuity planning effort includes, among other things, (1) establishing a business continuity project work group that reports to executive management and includes representatives from major business units, (2) developing and documenting a high-level business continuity planning strategy that includes project structure, metrics and reporting requirements, and cost and schedule estimates, (3) defining core business processes and the supporting mission-critical systems, and (4) implementing quality assurance reviews to verify that the business continuity plans satisfy information requirements.

DEA has implemented all of the initiation phase key processes. For example, DEA's Year 2000 Program Office (1) established a BCCP task force, which reports to senior management and consists of division and

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contractor representatives, to help develop guidance and review contingency plans; (2) documented and communicated the business continuity planning project structure and reporting requirements throughout the agency through management memoranda and briefings, developed reporting metrics to support executive management's reporting requirements, and developed initial cost and schedule estimates for the business continuity planning activities; (3) defined its six core business processes and identified the mission-critical systems that support each of them; and (4) tasked the BCCP task force and its supporting contractors to review the divisions' plans for adherence to DEA's guidance and consistency, and to ensure that the plans address appropriate core business processes.

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**DEA Has Satisfied or Plans to Satisfy All Business Impact Analysis Key Processes**

The objective of the business impact analysis phase is to determine the effect of mission-critical information systems' failures on the viability and effectiveness of agencies' core business processes. According to our guide, effective business impact analysis includes, among other things, (1) defining and documenting Year 2000 failure scenarios, (2) performing risk and impact analyses of each core business process, and (3) defining the minimum acceptable level of output and services for each core business process.

DEA has fully satisfied, partially satisfied, or has plans to satisfy all business impact analysis key processes. For example, DEA's Year 2000 Program Office (1) defined general failure scenarios, such as infrastructure outages or system failures, and directed the headquarters and field divisions to ensure that failure scenarios are defined in their business continuity plans and (2) assigned risks and assessed the impact of internal and external system failures on each core business process and instructed the field and headquarters divisions to perform risk and impact analyses for the core business processes that they support. In addition, during the business continuity plan review and revision process, DEA Year 2000 program officials plan to ensure that the divisions define the minimum acceptable levels of service for each core business process. According to these officials, the criteria for establishing the minimal acceptable levels are those which will not compromise the safety and security of DEA resources.

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## DEA Has Fully or Partially Satisfied Most Contingency Planning Key Processes

The purpose of the contingency planning phase is to integrate and act on the business impact analysis results. According to our contingency planning guide, effective contingency planning includes, among other things, (1) defining and documenting triggers for activating contingency plans for each core business process, (2) developing and documenting a “zero day”<sup>3</sup> strategy and procedures, (3) establishing a business resumption team for each core business process that is responsible for managing and implementing the contingency plans, and (4) assessing the costs and benefits of identified alternatives and selecting the best contingency strategy for each core business process.

DEA has fully or partially satisfied all but one contingency planning key process. For example, DEA (1) defined triggers for activating contingency plans in case of IT and infrastructure failures, such as loss of system services, communications services, and emergency services, and (2) developed a “zero day” strategy that includes participation by all sites during the Year 2000 transition weekend—December 30, 1999, through January 2, 2000. Further, DEA plans to establish and train Year 2000 business response teams within its existing “command center” support structure to ensure that Year 2000 contingency plans can be successfully executed if necessary.

However, DEA has not assessed the costs and benefits of identified contingency alternatives and its guidance does not instruct the headquarters and field divisions to complete cost/benefit analyses during the development of their business continuity plans. DEA’s Year 2000 program officials stated that, during the review of the divisions’ draft plans, they would consider the cost effectiveness of alternative contingency strategies.

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## DEA Plans to Satisfy All Testing Key Processes

The objective of the testing phase is to verify that, when implemented, contingency plans provide the required levels of business performance. According to our continuity planning guide, effective testing includes,

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<sup>3</sup>A “zero day” strategy includes procedures for minimizing the risk associated with potential Year 2000-induced failures for the period between December 30, 1999, and January 3, 2000. This strategy may include an agencywide shutdown of all information systems on December 31, 1999, and a phased power-up on January 1, 2000. The shutdown may extend to infrastructure systems, including local area networks, elevators, and building management systems.

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among other things, (1) validating the business continuity strategy through reviews, rehearsals, or quality assurance audits, (2) establishing test teams responsible for preparing and executing the contingency plan test and acquiring contingency resources, and (3) updating the business continuity plans based upon lessons learned and retesting if necessary.

DEA plans to satisfy all the key processes for the testing phase. For example, DEA's draft *Business Continuity and Contingency Plan* and master test plan include plans to (1) conduct "talk-throughs," "walk-throughs," and simulations—with participation by system owners, business owners, and users—to ensure that the system-level contingency plans support DEA's core business processes and to rehearse the divisions' business continuity plans, (2) establish business response teams and command centers at headquarters and throughout the headquarters and field divisions that are responsible for executing the tests, and (3) update its division- and agency-level business continuity plans based upon lessons learned and to retest them, if necessary.

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## Conclusions

DEA is developing Year 2000 contingency plans for continuity of business operations and has established effective management controls for ensuring that this very important Year 2000 risk mitigation task is completed on time. However, DEA is behind our recommended schedule, has many important planning steps yet to complete, and has very little time to address any slippage in its schedule. As a result, it is important that DEA's leadership continue to closely monitor business continuity planning efforts to ensure that any deviations from plans are identified and that corrective actions are taken immediately. While management structures and processes cannot guarantee that DEA will not experience Year 2000-induced system failures and business impacts, if the agency implements its plans and follows its policies and procedures to ensure that remaining business continuity tasks are completed, it should effectively reduce the severity of these impacts.

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## Agency Comments

We provided the attached briefing to DEA officials, including the senior DEA Year 2000 official, on July 20, 1999, who agreed with our findings and conclusions and provided some updated status information. We incorporated DEA's comments into the briefing where appropriate before briefing your office on July 21, 1999.

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We are sending copies of this report to the Honorable Jacob J. Lew, Director, Office of Management and Budget; the Honorable Janet Reno, Attorney General; and the Honorable Thomas A. Constantine, Administrator, U.S. Drug Enforcement Administration. Copies will be made available to others upon request.

If you have any questions regarding this report, please contact me or Deborah Davis, Assistant Director, at (202) 512-6240 or by e-mail at [hiter.aimd@gao.gov](mailto:hiter.aimd@gao.gov) or [davisd.aimd@gao.gov](mailto:davisd.aimd@gao.gov). Key contributors to this assignment were Tonia Brown and Teresa Tucker.

A handwritten signature in black ink, reading "Randolph C. Hite". The signature is fluid and cursive, with the first name "Randolph" being the most prominent part.

Randolph C. Hite  
Associate Director, Governmentwide  
and Defense Information Systems

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# Briefing to the Senate Special Committee on the Year 2000 Technology Problem

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**GAO Accounting and Information  
Management Division**

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## **Briefing to Senate Special Committee on Year 2000 Technology Problem**

**DEA Has Established Effective  
Year 2000 Business Continuity  
Planning Controls**



**July 21, 1999**

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## GAO Overview

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- Objectives, Scope, and Methodology
- Results in Brief
- Background
- Detailed Results
- Conclusions

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## GAO Objectives, Scope and Methodology

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The Committee asked us to determine

- the status of and plans for completing DEA's contingency planning for continuity of business operations and
- whether DEA's contingency planning efforts satisfy the key processes in GAO's contingency planning guide.\*

\* Year 2000 Computing Crisis: Business Continuity and Contingency Planning (GAO/AIMD-10.1.19, August 1998).

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## GAO Objectives, Scope and Methodology (cont'd)

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### GAO Contingency Planning Guide

#### Initiation

- Establish continuity work group and develop high-level planning strategy and related guidance and procedures. (8 key processes)

#### Business Impact Analysis

- Assess risk and impact of system failures on core business processes and define minimum acceptable levels of output. (5 key processes)

#### Contingency Planning

- Develop contingency plans and implementation modes, assign resumption teams, and define implementation triggers. (5 key processes)

#### Testing

- Develop contingency test plans, execute tests, and validate business continuity strategy. (8 key processes)

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## GAO Objectives, Scope and Methodology (cont'd)

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- Reviewed business continuity plans and schedules; discussed their implementation with DEA Year 2000, operational division, and contractor officials; obtained and reviewed documentation to corroborate officials' statements; and compared plans and progress to GAO advocated milestones.
- Analyzed management structures and controls (organization, policies, guidance, standards) in place and compared these to the key processes in GAO's contingency planning guide.

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## GAO Objectives, Scope and Methodology (cont'd)

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- We performed our work from March 1999 through June 1999 in accordance with generally accepted government auditing standards.

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## GAO Results In Brief

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- Objective 1: DEA has made progress in its business continuity planning, but has a limited amount of time left to complete important tasks.
- Objective 2: DEA has satisfied or has plans to satisfy many GAO contingency planning key processes.

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## GAO Background

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- The DEA's mission is to
  - enforce the controlled substances laws and regulations of the United States;
  - bring to the criminal and civil justice systems organizations and individuals involved in the growing, manufacture, or distribution of controlled substances;
  - recommend and support programs aimed at reducing the availability of illicit controlled substances.

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## GAO Background (cont'd)

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- DEA's core business processes are:
  - Investigations of regional, national, and international drug cases
  - Tracking information on domestically cultivated and manufactured illegal drugs
  - Enforcement of the country's drug laws
  - Regulation and control of the distribution of controlled substances (Diversions)
  - Human Resource issues such as payroll, health, staffing, and training
  - Financial management of payroll, paying bills, and ordering supplies

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## GAO Background (cont'd)

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- To carry out its mission, DEA depends on information technology (IT) systems such as:
  - Narcotics and Dangerous Drugs Information System which includes information on people, businesses, vessels, and selected airfields of interest to DEA's investigative process.
  - Automation of Reports and Consolidated Orders System which is used to track the sales and purchases of illegal drugs.

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## GAO Background (cont'd)

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- DEA's computer centers in Rockville, MD and Dallas, TX support headquarters and
  - 21 domestic field divisions
  - 7 analytical laboratories
  - 77 offices in 56 foreign countries.
- All DEA locations are linked by both classified and non-classified networks.
- DEA has 38 mission-critical IT systems and hundreds of mission-critical non-IT assets, including laboratory equipment and telephone and building systems.

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## GAO **Objective 1: Limited Time to Complete Important Tasks**

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- Year 2000 Program Office provided guidance to the divisions in March 1999\* and directed them to, among other things:
  - identify potential failure scenarios
  - assign operational priorities
  - designate roles and responsibilities
  - identify alternative emergency procedures.

\* GAO recommends that agencies initiate business continuity planning during the assessment phase.

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## GAO **Objective 1: Limited Time to Complete Important Tasks**

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- The Year 2000 Program Office briefed the headquarters and field divisions and presented Year 2000 BCCP strategy and milestones to the Special Agents-in-Charge and executive staff.
- DEA plans to complete development of business continuity plans in late July 1999, exceeding the April 30, 1999, date recommended by GAO.
- DEA plans to complete testing of its business continuity plans by November 1999, which is after the September 30, 1999 date recommended by GAO.

## GAO Objective 2: Many GAO Key Processes Being Satisfied

| <i>Phase</i>             | <i>Satisfied</i> | <i>Partially Satisfied</i> | <i>Plans to Satisfy</i> | <i>Not Satisfied</i> |
|--------------------------|------------------|----------------------------|-------------------------|----------------------|
| Initiation               | 8                | 0                          | 0                       | 0                    |
| Business Impact Analysis | 2                | 2                          | 1                       | 0                    |
| Contingency Planning     | 1                | 3                          | 0                       | 1                    |
| Testing                  | 0                | 2                          | 6                       | 0                    |
| Total                    | 11               | 7                          | 7                       | 1                    |

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GAO **Objective 2: Many GAO Key  
Processes Being Satisfied (cont'd)**

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- Definition of results:
  - *Satisfied* - key process developed and implemented; documentation provided
  - *Partially satisfied* - some components, but not all, of key processes developed and implemented; documentation provided
  - *Plans to satisfy* - key process not yet developed or implemented, but may be ongoing and guidance directs divisions to develop
  - *Not satisfied* - key process not developed and not addressed in guidance to divisions

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## GAO Detailed Results: Initiation Phase

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| <i>GAO Key Processes</i>                                                         | <i>Results</i> |
|----------------------------------------------------------------------------------|----------------|
| 1. Establish business continuity work group                                      | Satisfied      |
| 2. Develop high-level business continuity planning strategy                      | Satisfied      |
| 3. Identify core business processes                                              | Satisfied      |
| 4. Define roles and assign responsibilities                                      | Satisfied      |
| 5. Develop master schedule and milestones                                        | Satisfied      |
| 6. Implement a risk management process and establish reporting system            | Satisfied      |
| 7. Assess existing business continuity, contingency, and disaster recovery plans | Satisfied      |
| 8. Implement quality assurance reviews                                           | Satisfied      |

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## GAO Detailed Results: Initiation Phase Key Process 1

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- A business continuity workgroup should be established that reports to executive management and includes representatives from major business units.
- DEA established a business continuity and contingency planning (BCCP) task force consisting of division representatives to help develop guidance and review contingency plans for the field divisions, and that reports to executive management.
- Satisfied

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## GAO Detailed Results: Initiation Phase Key Process 2

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- A high-level business continuity strategy should be developed to guide the planning effort. It should include project structure, metrics and reporting requirements, and cost and schedule estimates.
- DEA's Year 2000 Executive documented and communicated project structure and reporting requirements throughout the agency.
- The Year 2000 Program Office developed reporting metrics and initial cost and schedule estimates.
- Satisfied

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## GAO Detailed Results: Initiation Phase Key Process 3

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- Core business processes and the supporting mission-critical systems should be defined for each business area.
- DEA defined core business processes and identified their supporting mission-critical systems.
- Satisfied

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## GAO Detailed Results: Initiation Phase Key Process 4

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- Roles should be defined and responsibilities assigned for leading the planning effort, performing analyses, and designing business alternatives.
- The Year 2000 Program Manager is responsible for overseeing and managing the agency-wide efforts, including managing risks to the planning effort. Special Agents-in-Charge and division heads are responsible for developing and implementing continuity plans for the field sites and headquarters divisions.
- Satisfied

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## GAO Detailed Results: Initiation Phase Key Process 5

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- Master schedule, including milestones for the delivery of interim and final products, should be established.
- DEA's Year 2000 Program Office defined a master schedule that includes milestones for draft and final contingency plans and testing.
- Satisfied

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## GAO Detailed Results: Initiation Phase Key Process 6

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- Organizations should implement a risk management process and establish a reporting system that includes identifying project risks, developing metrics, and establishing reporting requirements.
  - DEA's Year 2000 Program Manager developed a risk mitigation tool and metrics to identify, measure, and manage risks.
  - Year 2000 Executive established and communicated reporting requirements for BCCP tasks through memos to the headquarters and field divisions.
  - Satisfied
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## GAO Detailed Results: Initiation Phase Key Process 7

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- Organizations should assess existing business continuity, contingency, and disaster recovery plans for their applicability in addressing the Year 2000 problem.
- DEA's BCCP task force and operational division assessed existing contingency and disaster recovery plans to address and mitigate Year 2000 risks.
- Satisfied

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## GAO Detailed Results: Initiation Phase Key Process 8

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- Quality assurance reviews should be conducted to verify that the continuity of operations plans satisfy information requirements.
- Year 2000 Program office has tasked contractors and the BCCP task force to review the divisions' plans for adherence to DEA's guidance, consistency, and assurance that the plans address appropriate core business processes.
- Satisfied

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## GAO Detailed Results: Business Impact Analysis Phase

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| <i>GAO Key Processes</i>                                                                      | <i>Results</i>      |
|-----------------------------------------------------------------------------------------------|---------------------|
| 1. Define and document information requirements, methods, and techniques                      | Partially satisfied |
| 2. Define and document Year 2000 failure scenarios                                            | Satisfied           |
| 3. Perform risk analysis of each core business process                                        | Partially satisfied |
| 4. Assess and document infrastructure risks                                                   | Satisfied           |
| 5. Define the minimum acceptable level of outputs and services for each core business process | Plans to satisfy    |

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## GAO Detailed Results: Business Impact Analysis Phase Key Process 1

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- Organizations need to define detailed information requirements, techniques, and methods for constructing a business continuity plan.
- Year 2000 Program Office defined and documented information requirements, methods, and techniques for developing business continuity plans in the guidance provided to the headquarters and field divisions.
- DEA's guidance does not address analysis of costs and benefits of business continuity alternatives.
- Partially satisfied

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## GAO Detailed Results: Business Impact Analysis Phase Key Process 2

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- Organizations need to define and document Year 2000 failure scenarios, including the loss of all mission-critical information systems, the possibility that problems may be encountered earlier than expected, and the potential disruption of infrastructure services.
- The Year 2000 Program Office has defined general failure scenarios and has directed the headquarters and field divisions to ensure that failure scenarios are defined in their continuity plans.
- Satisfied

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## GAO Detailed Results: Business Impact Analysis Phase Key Process 3

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- Organizations should monitor Year 2000 progress and determine the risk and impact of internal and external system failures on each core business process.
  - The Year 2000 Program Office assigned risks and assessed impacts of internal and external system failures on each core business process; DEA prepared contingency plans for its 38 mission-critical systems.
  - Field and headquarters divisions have been instructed to perform risk and impact analyses for the core business processes which they support.
  - Partially satisfied
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## GAO Detailed Results: Business Impact Analysis Phase Key Process 4

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- Organizations should monitor the Year 2000 readiness of the public infrastructure, assess the risk of service outages, and determine whether emergency services may be available to mitigate outages.
- DEA has assessed and documented public infrastructure risks and used this information in developing contingency procedures in its headquarters and field business continuity plans.
- Satisfied

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## GAO Detailed Results: Business Impact Analysis Phase Key Process 5

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- To facilitate the selection of adequate contingencies, organizations need to define the minimum acceptable level of output and services for each core business process.
- DEA's initial guidance to headquarters and field divisions do not include this requirement; however, DEA Year 2000 Program Office officials stated that they plan to determine minimal acceptable levels of output for core business processes during the review of the draft business continuity plans.
- Plans to satisfy

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## GAO Detailed Results: Contingency Planning Phase

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| <i>GAO Key Processes</i>                                                                                                           | <i>Results</i>      |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1. Assess the cost and benefits of identified alternatives and select the best contingency strategy for each core business process | Not satisfied       |
| 2. Identify and document contingency plans and implementation modes                                                                | Partially satisfied |
| 3. Define and document triggers for activating plans                                                                               | Partially satisfied |
| 4. Establish a business resumption team for each core business process                                                             | Partially satisfied |
| 5. Develop and document "zero day" strategy and procedures                                                                         | Satisfied           |

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## GAO Detailed Results: Contingency Planning Phase Key Process 1

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- Organizations need to assess the cost and benefits of identified alternatives and select the best contingency strategy for each core business process.
- Guidance does not instruct the headquarters and field divisions to complete this process; however, DEA Year 2000 Program Office officials stated that they plan to assess the costs and benefits of alternative strategies during the review of the draft plans.
- Not satisfied

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## GAO Detailed Results: Contingency Planning Phase Key Process 2

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- Organizations need to identify and document contingency plans and implementation modes.
- DEA is developing draft business continuity plans and defining implementation modes for both field and headquarters divisions' core business processes.
- Partially satisfied

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## GAO Detailed Results: Contingency Planning Phase Key Process 3

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- Organizations need to define and document triggers for activating contingency plans for each core business process.
- The Year 2000 Program Office has defined triggers for activating contingency plans in case of IT and infrastructure systems failures.
- DEA's headquarters and field divisions are defining triggers for activating contingency plans in their site-specific continuity plans.
- Partially satisfied

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## GAO Detailed Results: Contingency Planning Phase Key Process 4

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- Organizations need to designate responsible individuals to ensure that the plans are executed if necessary.
- DEA has developed procedures for supporting continuity of operations based upon its existing “command center” support structure centralized at headquarters.
- DEA is establishing and training Year 2000 business response teams at each site to ensure that plans can be successfully executed if necessary.
- Partially satisfied

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## GAO Detailed Results: Contingency Planning Phase Key Process 5

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- Organizations should develop a risk reduction strategy and procedures for the period between December 30,1999, and January 3, 2000.
- DEA has developed a “zero day” strategy that includes participation by all sites for the weekend of December 31,1999.
- Satisfied

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## GAO Detailed Results: Testing Phase

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| <i>GAO Key Processes</i>                                                                   | <i>Results</i>      |
|--------------------------------------------------------------------------------------------|---------------------|
| 1. Validate business continuity strategy                                                   | Plans to satisfy    |
| 2. Develop and document contingency test plans                                             | Plans to satisfy    |
| 3. Establish test teams and acquire contingency resources                                  | Partially satisfied |
| 4. Prepare for and execute tests                                                           | Partially satisfied |
| 5. Validate the capability of contingency plans                                            | Plans to satisfy    |
| 6. Rehearse business resumption teams                                                      | Plans to satisfy    |
| 7. Update the business continuity plan based upon lessons learned and re-test if necessary | Plans to satisfy    |
| 8. Update disaster recovery plans and procedures                                           | Plans to satisfy    |

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GAO **Detailed Results: Testing Phase**  
**Key Process 1**

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- Agencies should validate business continuity strategies through reviews, rehearsals, or quality assurance audits.
- DEA is conducting “talk-throughs”, “walk-throughs”, and simulations to ensure that the systems contingency plans support core business processes.
- DEA plans to rehearse the divisions’ business continuity plans.
- Plans to satisfy

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GAO **Detailed Results: Testing Phase**  
**Key Process 2**

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- Agencies should define, document, and review contingency test plans.
- DEA plans to define and document test plans for the headquarters and field divisions' contingency plans.
- DEA has allocated time in the schedule for testing business continuity plans and plans to develop test scenarios for both levels.
- Plans to satisfy

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GAO **Detailed Results: Testing Phase**  
**Key Process 3**

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- Agencies should establish test teams and acquire contingency resources.
- DEA is establishing business response teams and command centers at headquarters and throughout the headquarters and field divisions which are responsible for executing the tests.
- DEA has requested funds from OMB to ensure that resources needed to carry out contingency plans are provided.
- Partially satisfied

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GAO **Detailed Results: Testing Phase**  
**Key Process 4**

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- Agencies should prepare for and execute tests.
- DEA has assigned responsibility to Year 2000 Program Office representatives to develop test plans, schedules, and scenarios and to execute the tests.
- DEA has plans to train teams to prepare for and execute tests.
- Partially satisfied

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GAO **Detailed Results: Testing Phase**  
**Key Process 5**

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- Agencies should validate the functional capability of each contingency plan.
- DEA is currently validating system contingency plans to ensure that the plans support continuity of business operations and that resources necessary to execute the plans are identified and made available to the field.
- DEA plans to validate business continuity plans to ensure that they support business functions.
- Plans to satisfy

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GAO **Detailed Results: Testing Phase**  
**Key Process 6**

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- Agencies should rehearse to ensure that each team and team member is familiar with procedures and their roles.
- DEA's high-level plans include milestones for business response teams' rehearsal activities.
- Plans to satisfy

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GAO **Detailed Results: Testing Phase**  
**Key Process 7**

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- Agencies should update the business continuity plan based upon lesson learned and re-test, if necessary.
- DEA's plans to update the continuity plans based upon results of test and validation activities.
- Plans to satisfy

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GAO **Detailed Results: Testing Phase**  
**Key Process 8**

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- Agencies should update disaster recovery plans and procedures.
- DEA has updated existing disaster recovery plans to consider Year 2000 disruptions.
- DEA plans to update all plans before the final rehearsal of the entire agency BCCPs.
- Plans to satisfy

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## GAO **Conclusions**

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- DEA is developing Year 2000 contingency plans for continuity of operations, and has generally established effective management controls for ensuring that this very important Year 2000 risk mitigation task is completed before January 1, 2000.
  - DEA has many important planning steps yet to complete and its milestones for doing so leave very little time to address any slippage in its schedule. As a result, it is important that DEA's leadership continues to closely monitor business continuity planning efforts to ensure that any deviations from plans are identified and that corrective actions are taken immediately.
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# Objectives, Scope, and Methodology

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Our objectives were to determine (1) the status of and plans for completing DEA's contingency planning for continuity of operations and (2) whether DEA's contingency planning efforts satisfy the key processes described in GAO's business continuity and contingency planning guide.<sup>1</sup>

To accomplish our first objective, we reviewed DEA's high-level strategy, plans, and schedules for developing and testing business continuity plans and compared these to our recommended milestones.<sup>2</sup> Additionally, we reviewed supporting documentation to evaluate the status and progress of DEA's efforts against its plans and schedules. Specifically, we reviewed project plans, progress and status reports, and Year 2000 program management memoranda. To supplement our analysis, we discussed the status of planned and ongoing activities with Year 2000 program officials responsible for implementing the management strategy and overseeing the divisions' activities, division chiefs responsible for developing business continuity plans, and contractors responsible for reviewing the plans and developing validation procedures.

We accomplished our second objective by identifying DEA's Year 2000 program management controls and comparing these to controls (i.e., key processes) described in our business continuity and contingency planning guide. In addition, we reviewed supporting documentation to verify that the management controls were functioning as intended and, using specified criteria,<sup>3</sup> determined whether each of the key processes were satisfied. To do this verification, we reviewed documents describing DEA's business continuity planning strategy, organization charts, documents describing business continuity planning activities, risk management matrices, contractors' statements of work, and business continuity planning guidance provided to the divisions by the Year 2000 Program Office. We then judgmentally selected eight draft business continuity plans for review

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<sup>1</sup>*Year 2000 Computing Crisis: Business Continuity and Contingency Planning* (GAO/AIMD-10.1.19, August 1998).

<sup>2</sup>*Year 2000 Computing Crisis: Readiness Improving, But Much Work Remains to Avoid Major Disruptions* (GAO/T-AIMD-99-50, January 1999).

<sup>3</sup>"Satisfied" means that the key process was developed and implemented and documentation was provided. "Partially satisfied" means that some components, but not all, of the key process were developed and implemented, and documentation was provided. "Plans to satisfy" means that the key process was not yet developed or implemented but may be ongoing and guidance directs the divisions to develop. "Not satisfied" means that the key process was not developed and not addressed in guidance to the divisions.

and compared these to the key processes in GAO's business continuity and contingency planning guide. To supplement our analysis, we interviewed key Year 2000 program officials, such as the Year 2000 executive and Year 2000 program manager, division representatives, and support contractor representatives.

We performed our work at DEA's headquarters in Arlington, Virginia. We performed our work from March through July 1999 in accordance with generally accepted government auditing standards. We updated the status of DEA's development of its business continuity plans through August 1999.

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