

**The Internal Revenue Service's  
Oversight of the Year 2000  
Conversion Can Be Strengthened**

**October 1999**

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DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

INSPECTOR GENERAL  
for TAX  
ADMINISTRATION

October 26, 1999

MEMORANDUM FOR COMMISSIONER ROSSOTTI

FROM:

Pamela J. Gardiner (for) *Scott E. Wilson*  
Deputy Inspector General for Audit

SUBJECT:

Final Audit Report – The Internal Revenue Service’s Oversight of  
the Year 2000 Conversion Can Be Strengthened

This report presents the results of our review of the Internal Revenue Service’s (IRS) Century Date Change (CDC) Project Office’s effectiveness in providing management oversight to ensure that the goals and objectives of the Year 2000 (Y2K) conversion efforts will be met. The review focused on seven key control areas within the CDC Project Office, which consist of conversion tracking, the master schedule, independent validation and verification, budget, contingency planning, risk management, and waivers. Due to the time criticality of the Y2K conversion issues, we discussed the findings in this report with the appropriate IRS officials throughout the review.

In summary, we found that the IRS’ CDC Project Office established an appropriate management controls framework for the Y2K conversion effort. However, the effectiveness of management oversight can be strengthened to ensure that the Y2K conversion is effectively monitored and accurately reported.

To strengthen management oversight of the Y2K conversion effort, the CDC Project Office should: ensure the accuracy and reliability of information used to manage the conversion effort; identify interdependencies among events, activities, and schedule slippage to better manage delays within the overall Y2K project; and continue to use contractor support to evaluate the impact of requests to delay conversion of certain components. In addition, the CDC Project Office should prioritize non-compliant systems and focus resources on the highest priority projects requiring contingency planning.

IRS management generally agreed with the facts cited in the report and is taking appropriate action. Management’s comments have been incorporated into the report where appropriate, and the full text of their comments is included as an appendix.

Copies of this report are also being sent to the IRS managers who are affected by the report recommendations. Please contact me at (202) 622-6510 if you have any

questions, or your staff may call Scott E. Wilson, Associate Inspector General for Audit (Information Systems Programs), at (202) 622-8510.

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### Executive Summary

The Year 2000 (Y2K) presents a significant challenge to Internal Revenue Service (IRS) operations. The IRS Chief Information Officer created the Century Date Change (CDC) Project Office to ensure that all current and future IRS information systems will be operational and functioning as intended on January 1, 2000. The overall objective of this review was to assess the CDC Project Office's effectiveness in providing management oversight to ensure that the goals and objectives of the Y2K conversion effort will be met.

### Results

Management controls established by the CDC Project Office provide an appropriate control framework to ensure that the objectives and goals of the IRS' Y2K conversion effort will be met. The CDC Project Office provides guidance and direction and monitors the status of Y2K conversion efforts assigned to various project owners and responsible executives. However, the effectiveness of management oversight by the CDC Project Office can be strengthened through its independent validation and verification of information reported by the working groups; its establishment of a control technique to identify schedule slippage and eliminate what could become crisis management; and its timely identification of risk implications associated with requests to delay conversion decisions.

### Controls Are Needed to Ensure the Reliability of Information Used to Manage the Conversion

The CDC Project Office does not independently validate or verify inventory information reported on the Integrated Network and Operations Management System (INOMS). This inventory information is used by the CDC Project Office to monitor the conversion effort. The Treasury Inspector General for Tax Administration (TIGTA) has made reference in a number of reports<sup>1</sup> that the INOMS inventory is incomplete or inaccurate, and reliance on this information could cause risk to the conversion effort. However, IRS management does not believe that the independent validation and verification of conversion status information is part of the CDC Project Office's responsibilities, thereby solely relying on

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<sup>1</sup> *Review of the Service's Year 2000 Conversion and Testing for Phase III* (Reference Number 083605, dated June 1998); *Review of Phase 4 Year 2000 Conversion and Testing* (Reference Number 090403, dated October 1998); *Review of the Internal Revenue Service's Year 2000 Contingency Planning Efforts* (Reference Number 092705, dated March 1999).

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the INOMS information received from the working groups. Further, IRS management relies too heavily on external auditors, such as the General Accounting Office and TIGTA to report issues and concerns with the conversion effort. Independent validation and verification of reported information strengthens management oversight and helps ensure that inaccurate information will be prevented or detected and corrected.

### **The Century Date Change Project Office Needs to Develop a Control Technique to Identify Interdependencies Among Events, Activities, and Schedule Slippage**

The CDC Project Office does not have a technique to identify critical schedule slippage and the possible impact on the overall conversion. Between now and December 31, 1999, the CDC Project Office must oversee a number of significant conversion events and activities, many of which have interdependencies among them. Although the CDC Project Office schedules<sup>2</sup> provide specific conversion information, they do not provide how milestone delays may affect the overall project. The lack of an integrated master schedule of all critical Y2K activities does not afford the CDC Project Office the IRS-wide perspective needed to steer the project partners, anticipate changes in Information Systems resources, develop alternative conversion and testing schedules, and help eliminate what may become crisis management.

### **The Impact of Delaying Year 2000 Conversion Decisions for Certain Components Should be More Timely Assessed**

The CDC Project Office is unable to timely evaluate requests for waivers and identify the potential impact on end-to-end<sup>3</sup> testing and/or contingency planning. The CDC Project Office initially established the waiver process to evaluate any system or component requiring an exemption from conversion and which would remain in-service after December 31, 1999. In August 1998, the CDC Project Office expanded the waiver process to include the movement to Phases<sup>4</sup> 6 and 7 of components to be retired after

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<sup>2</sup> The master schedule rolls together work breakdown structures for all of the supporting organizations, and the Location Specific Deployment Schedule shows a subset of program activities that will be performed at or directly impact a specific location.

<sup>3</sup> End-to-end testing is the process of systematically testing the paths through which tax data will move from input all the way to output, including exercising the interfaces between systems, hardware, and operating system software, and users.

<sup>4</sup> A phase refers to the regular delivery period of the IRS, ending in January and July of each year, in which application code would be converted. However, Phases 6 and 7 were added for new developments and rare

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January 31, 1999; components to be converted but not completed by January 31, 1999; or new developments. The result was a significant increase in the number of waiver requests received near the end of Phase 5. As of March 15, 1999, the CDC Project Office had 135 open waivers that had not been reviewed or approved. This number equates to a workload of approximately 19 weeks to complete the review for potential risks and impact. In February 1999, Booz-Allen Hamilton was contracted by the CDC Project Office to assist in the waiver review process.

### **Summary of Recommendations**

To strengthen management oversight of the Y2K conversion effort, the CDC Project Office should: ensure the accuracy and reliability of information used to manage the conversion effort; identify interdependencies among events, activities and schedule slippage to better manage delays within the overall Y2K project; and continue to use contractor support to evaluate waiver requests. In addition, the CDC Project Office should prioritize non-compliant systems and focus resources on the highest priority projects requiring contingency planning.

Management's Response: IRS management generally agreed with the facts cited in the report and is taking appropriate corrective action. Management's comments are included in the body of the report, where appropriate, and a complete text appears as Appendix IV.

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exceptions to current components that will be placed in production after January 1999 and do not follow the same production dates.

## **Objective and Scope**

The overall objective of this review was to assess the Internal Revenue Service's (IRS) Century Date Change (CDC) Project Office's effectiveness in providing management oversight to ensure that the goals and objectives of the Year 2000 (Y2K) conversion efforts will be met. The review focused on seven key control areas within the CDC Project Office, which consist of conversion tracking, the master schedule, independent validation and verification, budget, contingency planning, risk management, and waivers.

We conducted audit work from November 1998 to July 1999. Audit work was conducted in accordance with *Government Auditing Standards*. Appendix I contains the detailed objective, scope, and methodology for our review. A listing of major contributors to this report is shown in Appendix II.

## **Background**

The IRS established the CDC Project Office in 1996 to provide oversight and to direct the conversion of all IRS Information Technology (IT) systems and Non-IT elements that would be affected by the Y2K date change. The primary goal of the CDC Project Office is to ensure that all current and future IRS systems are compliant prior to January 1, 2000.

In helping to achieve this goal, the CDC Project Office is assisted in the conversion of IRS components<sup>1</sup> by support organizations, work groups, teams, and steering committees.

*The goal of the CDC Project Office is to ensure that all IRS systems are Y2K compliant.*

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<sup>1</sup> A component is a distinguishable and accountable stand-alone element within an application system. For the purpose of this report, Telecommunication products, Commercial Off-the-Shelf (COTS) products and Non-IT products are also referred to as components.



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In carrying out its oversight responsibilities, the CDC Project Office: established overall project policies and procedures; issued conversion standards; developed methodologies used for measuring conversion progress; and created conversion schedules and milestones. The Integrated Network and Operations Management System (INOMS), an inventory which contains information for all IRS applications and Commercial Off-the-Shelf (COTS) products, was modified to meet the CDC Project Office's need for an automated tracking mechanism and serves as the primary control for tracking the overall conversion effort.

Currently, the IRS uses a 2-digit year date format representation in its computer systems, which may affect mathematical calculations and other critical computer operations after December 31, 1999. Consequently, the CDC Project Office adopted the National Institute of Standards and Technology standard of expanding all 2-digit year fields to 4-digit year fields. To ensure all existing and developmental IRS applications are operational and functioning as intended to this standard, the CDC Project Office established a 14-step process to be followed for components listed in INOMS which require conversion. The primary activities within the 14 steps involve identifying the components for conversion, performing impact analysis<sup>2</sup> to assess the scope of conversion requirements, determining source code compliance, performing the conversion, unit<sup>3</sup> and system<sup>4</sup> testing, and certifying the converted components. As each component completes a given milestone, field site personnel update INOMS to reflect the completion date. To account for those instances when a component is not taken through the 14-step process and will remain in service after

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<sup>2</sup> Impact Analysis refers to the code analysis of the applications prior to conversion.

<sup>3</sup> Unit Testing is an assessment to determine whether individual products (hardware or software) perform to Y2K specifications.

<sup>4</sup> System Testing is an independent assessment of the quality of the systems software that determines if it satisfies the customer-specified requirements.

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December 31, 1999, an approved waiver must be obtained.

Each week the CDC Project Office assigns a status indicator based on the variance between the planned and actual percentage of conversion activities. The CDC Project Office uses status information reported on INOMS to create the Dashboard. The Y2K Project Dashboard is a one-page report that is color-coded red (more than 15 percent late), yellow (greater than 5 and less than 15 percent late), and green (less than 5 percent late) to indicate the progress status for the 13 major CDC project areas. During a phase, progress can be assessed for the conversion activities by dividing actual number of days that have lapsed by the number of days planned to complete a phase, to reflect the percentage completed for each phase. For those components in yellow or red status, the CDC Project Office requests confirmation from the owners<sup>5</sup> as to the current status of the component and to also determine how the project intends to get back on schedule.

### Results

The CDC Project Office established a number of management controls to provide an appropriate control framework to ensure that the goals and objectives of the conversion effort will be met. The CDC Project Office also established an intranet website used to disseminate policies and procedures and provide overall project information. Further, the CDC Project Office holds numerous weekly meetings with responsible executives from Information Systems (IS) Division and field and customer organizations to discuss conversion progress for software applications, COTS products, inventory issues, External Trading Partners, and century date issues and risks. Specifically in these meetings, the

*The CDC Project Office established a number of controls to assist in the Y2K conversion effort.*

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<sup>5</sup> An owner is responsible for the day-to-day operation and maintenance of the IRS automated data processing equipment and associated software, and is also responsible for updating INOMS.

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CDC Project Office provides guidance and direction to each of the supporting organizations and project offices.

Although the management controls established by the CDC Project Office provide an appropriate control framework to ensure that the organization's goals and objectives will be met, the effectiveness of management oversight can be strengthened.

The effectiveness of management oversight can be strengthened by: the independent validation and verification of information reported to the CDC Project Office; the establishment of a control technique to identify overall schedule slippage and to eliminate what could become crisis management; and a more timely identification of the impact in delaying Y2K conversion decisions for certain components.

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### **Controls Are Needed to Ensure the Reliability of Information Used to Manage the Conversion**

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*Information used to monitor the conversion effort is not independently validated or verified by the CDC Project Office.*

The CDC Project Office does not independently validate or verify INOMS information that it uses to monitor the conversion effort. The information reported on INOMS reflects the current status of the conversion and certification of all IRS IT components. This information is also used to periodically report on the overall progress of the IRS conversion internally, and to the Department of the Treasury, the Office of Management and Budget, the General Accounting Office (GAO) and the Congress.

*Conversion status reflected as favorable was later determined to be inaccurate.*

Since 1998, the former IRS Office of Chief Inspector and the Treasury Inspector General for Tax Administration (TIGTA) have reported several instances where information entered into INOMS and reported to the CDC Project Office was incorrect. In many instances, the information reported indicated a favorable conversion status; however, this information was later determined to be inaccurate. For example, we identified:

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- The Tier II<sup>6</sup> Program Office monitors 66 minicomputer systems for Y2K compliance. These systems were scheduled to be converted by January 31, 1999. TIGTA identified at least 22 Tier II systems which did not meet the January 31, 1999, due date for conversion, 12 of which are considered mission critical.<sup>7</sup> Rather than classifying these systems as red, which indicated the milestones as past due and would require enhanced oversight by the CDC Project Office, many of the milestones were extended by the various systems Project Offices, resulting in systems being classified as either green or yellow. Five of the systems' conversion dates are now scheduled for September and October 1999.<sup>8</sup>
- The CDC Project Office requires that three milestone dates<sup>9</sup> be entered into INOMS to assist in tracking component progress. We identified inaccuracies in some milestone dates on INOMS related to the Y2K conversion efforts being coordinated with banks and other private organizations and government agencies (i.e., "external trading partners"). In 125 data files reviewed, we found that 28 (22 percent) had at least 1 milestone date inaccurately recorded as completed.<sup>10</sup>
- TIGTA has made reference in a number of reports that significant risk exists that the INOMS inventory

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<sup>6</sup> Tier II is the conversion of minicomputer systems.

<sup>7</sup> Mission critical systems are those systems supporting essential business activities or a process involving tax activities.

<sup>8</sup> TIGTA audit report, *Increased Validation and Oversight of Year 2000 Minicomputer Conversion Efforts are Needed to Strengthen Testing and to Avoid Further Delays* (Reference Number 199920054, dated August 1999).

<sup>9</sup> Compatibility testing, technical contact, and production.

<sup>10</sup> TIGTA audit report, *Opportunities Remain for the Internal Revenue Service to Further Minimize the Risks Associated with Implementing Year 2000 Compliance with External Trading Partners* (Reference Number 095202, dated August 1999).

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may be incomplete or inaccurate, and reliance on the information is insufficient when monitoring the conversion. The Tier II Site Coordination Office is currently using a phased-milestone approach to complete its Y2K activities. The final phase is the process of transmitting the application to each site where it will be installed. In February 1999, the Tier II Site Coordination Office indicated the inventory was 99 percent accurate. However, no reconciliation had been performed between the INOMS inventory and the application and operational owners.

- The Telecommunications Project Office has also relied on INOMS to identify its equipment items needing conversion. However, the Telecommunications Project Office did not reconcile its inventory listing with the physical inventory located in the service centers. Consequently, a significant amount of telecommunication equipment could not be found on the inventory maintained by the IRS. TIGTA identified that the Telecommunication's inventory was 43 percent inaccurate. IRS' Inventory Steering Committee confirmed this error rate. The omission of items from the inventory will hamper the IRS' efforts to furnish a telecommunications environment that will operate without problems in the year 2000.<sup>11</sup>

Each week the CDC Project Office assigns a status indicator based on the variance between the planned and actual percentage of conversion activities. Upon completion of its review of the status information, the CDC Project Office contacts the owners to request a narrative explanation as to why component status is yellow or red. In many instances, responses from project partners are either not received or do not contain the information regarding why they are behind schedule,

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<sup>11</sup> TIGTA audit report, *Review of the Internal Revenue Service's Year 2000 Efforts to Inventory Telecommunications and Commercial Off-the-Shelf Products* ( Reference Number 092402, dated February 1999).

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*Management does not believe that independent validation and verification is the CDC Project Office's responsibility.*

how they plan to bring the project back on schedule, and the revised completion dates.

The Deputy Chief Information Officer, Systems, and CDC Project Office management stated that independent validation and verification are not considered a part of their responsibilities to be performed. The CDC Project Office relies upon the accuracy of information provided by the project owners and responsible executives and does not perform independent validation and verification of the information reported. Further, the IRS has relied on GAO and TIGTA to provide both independent validation and verification of information and to point out issues and concerns with the conversion effort. GAO's report, *Year 2000 Computing Crisis*, indicated that agencies should consider subjecting their Y2K program to independent validation and verification efforts.

By placing reliance on information which is not independently validated or verified when received from the project partners, the CDC Project Office may not be ensuring the effectiveness of established controls, such as a Risk Management and Contingency Management Plan. Incorrect information could lessen the perceived severity level of a potentially high-risk area. Further, incorrect information could delay the development of a Contingency Management Plan.<sup>12</sup> For example:

- The IRS implemented a structured process to manage risks associated with the CDC conversion effort. A risk is the probability of an event occurring that adversely impacts the CDC project mission. The Director, CDC Project Office, subjectively sets risk severity levels<sup>13</sup> and makes the final decision whether to remove a risk from the risk management database or lower the severity rating. These decisions are based on information that is received

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<sup>12</sup> A Contingency Management Plan is an alternative plan used if components do not become compliant by the scheduled target date.

<sup>13</sup> Risk severity level is determined by contrasting the probability that an impact will occur against the severity of the impact on project success.

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from the working groups, and inaccurate information may adversely influence those decisions.

- The CDC Contingency Management Plan Procedures require that when a conversion effort is in red status and more than 40 percent of the phase is complete, the CDC Project Office should send out an Early Warning Memorandum (EWM). The EWM directs the technical owners<sup>14</sup> to take immediate action to get the conversion back on schedule. When the phase reaches 60 percent complete, the CDC Project Office issues a Contingency Plan Request Memorandum (CPRM) for conversion efforts in red status. When this occurs, technical owners are required to provide a response to the CDC Project Office within 60 days. The response should contain a contingency plan alternative, resources required for implementation, impact on ongoing conversion efforts, and contingency plan milestones.

Between June 30, 1998, and February 16, 1999, 133 CPRMs were generated, of which 128 were either cancelled or suspended as the projects moved from red to green status within 30 days of issuance. If projects reflect an optimistic view by changing the status, the CDC Project Office may fail to detect the need for a Contingency Management Plan.

### Recommendation

1. The CDC Project office should establish an effective control which ensures the accuracy and reliability of information used to manage the conversion effort.

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<sup>14</sup> Technical owners provide expertise on development and maintenance services for equipment and systems supporting a business function.

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Management's Response: The CDC Project Office implemented several initiatives to validate information provided to manage the conversion effort. These initiatives include independent verification and validation, independent audit and readiness verification, a wall-to-wall inventory, audits of system owner sponsored end-to-end tests, follow-up on TIGTA/GAO audits, and various oversight meetings.

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### **The Century Date Change Project Office Needs to Develop a Control Technique to Identify Interdependencies Among Events, Activities, and Schedule Slippage**

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The CDC Project Office does not have a technique to identify critical schedule slippage which would identify the interdependencies among events, activities, and schedule slippage, as well as, the possible impact on the overall Y2K conversion. As January 1, 2000, approaches, increased demands will be placed upon resources required to complete the conversion of IRS systems. In addition, between now and December 31, 1999, the CDC Project Office must oversee a number of significant conversion events and activities, many of which will have interdependencies among them. For example, testing that is normally performed prior to the filing season and the certification that the systems are working properly will have to be completed much earlier because of demands for end-to-end testing and issues surrounding the Y2K conversion. In addition, delays in reviewing programming changes as a result of delays in completing the IRS inventory cannot immediately be assessed to determine the impact on the overall project. Although the CDC Project Office schedules provide specific conversion information, they do not provide how milestone delays may affect the overall project. In addition, the CDC Project Office does not have a technique to identify critical schedule slippage in time for corrective action.

*A technique to identify critical schedule slippage does not exist.*

Typically, a large project encompasses a long series of



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milestones, which can be cumbersome. However, crucial milestones, referred to as a critical path, are those that, if not completed on schedule, can cause slippage in subsequent events and milestones. A milestone schedule provides the basis for scheduling, establishing risk, and coordination of objectives and control among projects. The level of detail should be sufficient to reflect the integration of efforts. However, the milestone schedule need not be at a level which ends up having a cost much higher than the benefit to be derived from its use. The milestone schedule should show the interdependencies between events and activities to provide an up-to-date picture of operations at all times. Finally, the milestone schedule can greatly help to reduce or eliminate crisis management.

*Delays experienced by the CDC Project Office could affect the entire IRS Y2K conversion.*

Any delays experienced by the CDC Project Office could affect significant activities or events, such as the end-to-end testing, and put the entire Y2K conversion at risk. Establishment of a milestone schedule could show the CDC Project Office the impact of any delays. Our assessment of the Y2K Conversion Process identified instances where a milestone schedule would have indicated a delay in the overall project conversion:

- The IS Division, Systems Software Branch, was not aware of what progress the field sites were making in implementing upgrades and fixes relating to whether products were Y2K compliant, and whether critical or priority levels of implementation and installation had been performed for mainframe computer and COTS products. Further, the CDC Project Office was not ensuring that the operational owners were establishing timelines and deadlines for their implementation schedules. Delays in the implementation and installation of fixes and upgrades could directly impact end-to-end testing initiatives.
- Within Tier II, the Site Coordination Office identified 49 mission critical and 53 non-mission critical computers which required replacement or where hardware upgrades were required to support the Y2K environment. The Site Coordination Office is currently using a 5-milestone approach.

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Milestone 4 is the process of upgrading the production platforms at each site and making them Y2K compliant. The Milestone 4 target date of February 13, 1999, was not met and the impact to the Y2K initiative has not been established.

GAO<sup>15</sup> and Booz-Allen Hamilton,<sup>16</sup> a contractor hired by the CDC Project Office, have recommended developing an integrated master schedule of all critical Y2K activities. Specifically, Booz-Allen Hamilton indicated that without a high-level chart of the dependencies, the CDC Project Office lacks the IRS-wide perspective needed to steer the project partners. In addition, the CDC project partners cannot anticipate changes in IS' staff resources or develop alternative conversion and testing schedules.

The CDC Project Office does maintain a master schedule that rolls together the work breakdown structure for all of the supporting organizations. Additionally, the CDC Project Office has developed a schedule<sup>17</sup> to show the subset of program activities that will be performed at or directly impact a specific location. Both of these schedules can be used to identify missed milestones, but neither schedule is able to indicate to the CDC Project Office when missed milestones will affect the overall project.

### Recommendation

2. The CDC Project Office should develop a technique to identify interdependencies among events, activities, and schedule slippage to allow it to better manage delays within the overall Y2K project.

Management's Response: The CDC Project Office will monitor dependencies at weekly progress meetings,

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<sup>15</sup> *IRS' Year 2000 Efforts: Business Continuity Planning Needed for Potential Year 2000 System Failures.*

<sup>16</sup> *IRS Year 2000 Assessment, Independent Verification and Validation and IRS Century Date Change Project Risk Assessment.*

<sup>17</sup> Location Specific Deployment Schedule.

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bi-weekly oversight and risk meetings, and review implementation dates identified in the Location Specific Deployment Schedule and the Infrastructure Matrix.

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### The Impact of Delaying Year 2000 Conversion Decisions for Certain Components Should be More Timely Assessed

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The CDC Project Office established the waiver process to evaluate any system or component not taken through the 14-step conversion which would remain in-service after December 31, 1999. In August 1998, the CDC Project Office expanded the waiver process to include the movement of components into Phases 6 and 7 for components to be retired after January 31, 1999; components to be converted but not completed by January 31, 1999; or new development. Components may not be moved to a later phase without an approved waiver. A risk analysis to determine the impact on end-to-end testing and an evaluation to determine the need for a contingency plan must first be completed before a waiver is granted.

*The increase in the number of waiver requests has significantly burdened the CDC Project Office.*

Between the end of Phase 5 and the beginning of Phase 6, the time period between January through March 1999, waiver requests received by the CDC Project Office increased 373 percent (26 to 123). The increase in the number of requests for waivers placed a significant burden on the CDC Project Office's ability to timely review and approve these requests.

Between October 1, 1998, and January 25, 1999, there were an average of 26 open waivers which were in the process of being reviewed and awaiting approval. However, during the 6 weeks after the end of Phase 5, there were an average of 123 open waivers. Our analysis of weekly status reports indicated that the CDC Project Office processed an average of seven waivers each week. At this rate, it will take the CDC Project Office approximately 19 weeks to process the remaining waivers. This workload does not take into account any additional waivers still to be received by the CDC

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Project Office.

*Movement of components to later phases would change the conversion dates and reflect an on-schedule status, which may be misleading.*

Unable to timely process these waivers, the Director, CDC Project Office, instructed organizations to move components into the later phases pending approval of their waivers. As a result, the movement of a component or system to Phases 6 or 7 would take them from being behind schedule to being on schedule for the purpose of conversion tracking. The established waiver process allowed movement of a component, which adjusted the conversion dates and gave the component a new deadline.

*Revising the waiver process was unnecessary, as existing controls were already adequate.*

The CDC Project Office's conversion tracking system measures weekly progress as a percentage of activities completed by phase. As a result, revising the waiver process and the resulting movement of components to later phases was not necessary. Any delays of component or system completion could be identified with a red status through conversion tracking and the risk evaluated at that time. However, the CDC Project Office cited that an evaluation of the components placed into Phases 6 and 7 was needed in order to determine impact on end-to-end testing or the need for contingency planning.

In February 1999, the CDC Project Office tasked Booz-Allen Hamilton and SRA to review waivers for impact on end-to-end testing and contingency planning. Booz-Allen Hamilton is reviewing 177 previously approved waivers, which includes those waivers retiring or converting components after January 31, 1999. SRA will review waivers still awaiting approval. On March 15, 1999, during our review, the total number of open waivers was 135.

*The CDC Project Office must realistically determine workload that can be completed before the year 2000.*

With the year 2000 quickly approaching, the CDC Project Office must be realistic when determining the amount of work that can be completed in the time remaining. The IRS could be at risk of major computer problems if the systems are not converted or contingency plans established. Therefore, emphasis on those components needing contingency plans should be

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prioritized.

### Recommendations

3. The CDC Project Office should continue to use the contractor to evaluate the waivers for impact on end-to-end testing and contingency planning.

Management's Response: The CDC Project Office will continue to use the contractor to evaluate the waivers for impact on end-to-end testing and contingency planning. In addition, the CDC Project Office is considering merging the two SRA teams in order to consolidate the process. All information necessary to determine approval or denial of the waiver, as well as to analyze the waiver request for potential risk requiring a contingency plan request memo to be issued, would be gathered at one time.

4. The CDC Project Office should prioritize non-compliant systems and concentrate resources on the highest priority projects requiring contingency planning.

Management's Response: The CDC Project Office will use fact sheets to gather information in order to prioritize requests for waivers and to determine the need to revise or add a contingency plan or whether no additional action is warranted. This process assures an efficient use of the CDC Project Office's resources in tracking the progress of CPRM actions.

### Conclusion

The Y2K conversion effort continues to present a significant challenge to the IRS' operations. The CDC Project Office's management oversight is necessary to ensure that the goals and objectives of the conversion effort will be met. The strengthening of IRS management oversight will help ensure that the Y2K conversion is effectively monitored and accurately reported.

**Detailed Objective, Scope, and Methodology**

The overall objective of our review was to assess the Internal Revenue Service's (IRS) Century Date Change (CDC) Project Office's effectiveness in providing management oversight to ensure that the goals and objectives of the IRS' Year 2000 (Y2K) efforts will be met. Specifically, we:

- I. Determined whether the CDC Project Office had identified and implemented adequate program management controls to manage the IRS' Y2K conversion efforts. Major emphasis was focused in the areas of: conversion tracking, the master schedule, independent validation and verification, budget, contingency planning, risk management, and waivers. These key controls were initially identified by the Treasury Inspector General for Tax Administration (TIGTA) and later confirmed with the CDC Project Office.
  - A. Reviewed governmental and departmental documents (i.e., General Accounting Office (GAO) and Treasury guidelines) to identify recommended management practices that agencies could implement to aid in administering Y2K programs.
  - B. Determined the types of management controls established within the IRS' Y2K program.
    1. Determined whether the desired objectives of program management controls are preventive, detective, limiting, or corrective in nature.
    2. Determined the type of risks each control was designed to alleviate.
    3. Performed walk-throughs on selected controls to determine whether they have been established and implemented, and documented how they were intended to work within a given process.
    4. Obtained internally developed documents on key program management controls to aid in the audit testing and evaluation process.
  - C. Reviewed GAO and TIGTA audit reports issued from prior Y2K audits to identify issues and corrective actions relating to the improvement of selected program management controls.
    1. Determined whether the respective corrective actions have been implemented.

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2. Determined whether any additional program management controls were, or should have been, implemented as a result of management's corrective actions.
- D. Interviewed IRS senior management affiliated with the CDC effort and personnel within selected CDC working groups to validate the Project Office's current program level roles and responsibilities, and determined whether clear lines of responsibility have been established.
1. Identified the role and responsibilities of the CDC Project Office. Also, confirmed the duties of this office with assigned CDC Project Office management.
  2. Determined whether select CDC Working Groups, which support major Y2K functions, understand the responsibilities of the Project Office, and whether the groups have fully accepted their assigned conversion requirements.
  3. Determined whether and how often the CDC Project Office coordinates with responsible working groups/support organizations to clarify duties and conversion requirements.
- II. Determined whether key program management controls were effective and provided the CDC Project Office with accurate information upon which to make decisions.
- A. Analyzed the program management controls and identified those that pose the highest/greatest potential risk to the Y2K program, if not working as intended.
- B. Assessed certain key program management controls, based on the associated risk factor(s), to determine whether the controls allow management to meet program objectives.
1. Determined whether the system of program level controls was documented.
  2. Determined whether controls have been established to validate or verify reported information.
  3. Determined whether information reported to the CDC Project Office, was accurate, reliable, timely, complete, and useful.

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4. Determined whether management had established controls to monitor the implementation of policies and procedures.
5. Determined whether CDC Project Office management performed periodic assessments of the controls to ensure they were working as intended.



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**Appendix II**

**Major Contributors to This Report**

Scott Wilson, Associate Inspector General for Audit (Information Systems Programs)  
Michael Phillips, Director  
Edward Coleman, Audit Manager  
Vincent J. Dell'Orto, Audit Manager  
S. Kent Johnson, Senior Auditor  
Barbara Sailhamer, Acting Senior Auditor  
Ruth Ware, Senior Auditor  
Bobbie Draudt, Auditor  
Art Granger, Auditor  
Melvin Lindsey, Auditor

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**Appendix III**

**Report Distribution List**

Deputy Commissioner Modernization C:DM  
Office of the Chief Counsel CC  
Chief Information Officer IS  
Deputy Chief Information Officer, Systems IS  
Assistant Commissioner (Program Evaluation and Risk Analysis) M:OP  
Director, Century Date Change Program Office IS:CD  
National Director for Legislative Affairs CL:LA  
Office of Management Controls M:CFO:A:M  
Audit Liaison (Attn: Frank Guarino) IS:I:IS:O:A  
Audit Liaison, Office of Program Oversight IS:PM:O

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Appendix IV

Management's Response to the Draft Report



COMMISSIONER

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D.C. 20224

September 22, 1999

OFFICE OF TREASURY  
INSPECTOR GENERAL  
RECEIVED

1999 SEP 23 A 11: 49

MEMORANDUM FOR TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

FOR TAX ADMINISTRATION

FROM: Charles O. Rossotti   
Commissioner of Internal Revenue

SUBJECT: Response to Draft Audit Report -- IRS' Oversight of the  
Year 2000 Conversion Can Be Strengthened

Thank you for giving me the opportunity to review and comment on your draft report and recommendations to strengthen IRS' oversight of our Year 2000 (Y2K) Program dated August 10, 1999.

The Year 2000 Program at the Internal Revenue Service is a top priority for the agency as well as a personal priority for me. In your August draft report, you noted several aspects of our Y2K Program that can be improved. I share your concerns and am actively managing those concerns through my leadership of the Combined Program Management for Century Date Change and Filing Season Executive Steering Committee (ESC).

Specifically, you noted the challenges IRS faces in ensuring the accuracy and reliability of information used to manage the Y2K effort. Although IRS has made many efforts to improve the quality of the information in our corporate inventory system, we continue to have serious problems which we are addressing through the ESC. As a result, the Chief Information Officer now has responsibility for the accuracy of IRS' information technology inventory. More information about our efforts to improve our technology inventory is included in the attached response.

You also commented on the need for IRS to identify project interdependencies. I, too, recognize the need to identify interdependencies as a critical piece of managing our Y2K Program. IRS has various processes in place that address this key management capability, and we are continuing to refine them as we actively oversee the Y2K effort.

In addition, you recommend that IRS continue to use contract support to evaluate whether extending Y2K conversion deadlines past initial schedules will affect IRS' final Y2K testing and contingency planning. I agree and plan to continue this practice.

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You also recommend that IRS prioritize our Y2K resources to ensure that we focus on the highest priority projects and complete all necessary work. As noted in the attached response, I feel we have sufficient processes and resources in place to complete our Y2K work. Prioritizing the few remaining projects, at this point, would not be the best use of our limited resources. Again, more detailed information is provided in the response.

If you have any questions, please call Paul Cosgrave, Chief Information Officer, at (202)622-6800, or have a member of your staff call David Junkins, Director, Office of Information Resources Management, at (202) 283-4060, or Barry Herrmann, Chief, Office of IS Program Oversight, at (202) 283-7698, as appropriate.

Attachment

cc: Associate Inspector General, Information Systems Program

## The Internal Revenue Service's Oversight of the Year 2000 Conversion Can Be Strengthened

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Attachment

### Management Response to Draft Audit Report - The Internal Revenue Service's (IRS) Oversight of the Year 2000 Conversion Can Be Strengthened (Audit Number 19980091)

#### Recommendation #1

The CDC Project Office should establish an effective control that ensures the accuracy and reliability of information used to manage the conversion effort.

#### Assessment of Cause

IRS organizations input information into the Integrated Network and Operations Management System (INOMS). IRS organizations do not always input accurate information into INOMS or provided accurate information used to manage the conversion effort.

#### Corrective Action #1 General Comments

The IRS decided early in the Year 2000 Conversion and Testing process to use INOMS as one of its tools for monitoring Y2k conversion progress. INOMS is the official certified inventory of ADP products for the IRS. The IRS must depend on the reporting of its executives regarding the completeness and accuracy of the items submitted in the inventory. The Century Date Change Project office (CDC PO) has since its inception developed reporting mechanisms to identify problems in the information input to INOMS.

Attached is a copy of the table of contents of a recent Century Date Change Field and Customer Controlled Systems Progress Report. The full report is currently 107 pages in length, detailing 85 reports used to monitor and manage the conversion and testing effort.

The CDC PO has led several major initiatives to improve the quality and accuracy of data in the inventory. These initiatives include establishing and implementing standard names for all 800,000 devices in the inventory; adding processes to assign responsibility for each device type to the appropriate organization for Y2k determination; tracking mechanisms to monitor the overall Y2k readiness of the inventory. These processes have led to improvements in the quality of the inventory.

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### Attachment

#### **Management Response to Draft Audit Report - The Internal Revenue Service's (IRS) Oversight of the Year 2000 Conversion Can Be Strengthened (Audit Number 19980091)**

Although many efforts have improved the quality of the INOMS information, data analysis by the Telecommunications and Operations Division (IS:O:O), the CDC PO, and TIGTA, have identified serious continuing problems. The CDC PO reported those problems to the Combined Management Program for the Century Date Change and Filing Season Executive Steering Committee. As a result, responsibility and authority for all Automated Data Processing (ADP) equipment in IRS, including inventory responsibility is being moved to the Chief Information Officer (CIO). Responsibility for the accuracy of the inventory now rests solely with the CIO. The wall to wall inventory reconciliation effort mentioned below is a result of this change in responsibility. By the end of the wall to wall effort in December 1999, the CIO will have certified the accuracy of the inventory in all of our major sites.

#### Corrective Action #1

Complete each of the following actions that have already been initiated:

The CDC PO implemented several initiatives to validate information provided to manage the conversion effort.

#### 1. Independent Verification and Validation (IV&V)

IRS directed Northrop Grumman to work with all IRS organizations to review the application systems code and the Commercial Off The Shelf (COTS) products to ensure that they are Y2k compliant. The IV&V directly validates or contradicts the information previously provided by the organizations in conducting conversion and testing milestones. All problems identified by the IV&V process are assigned and tracked until resolution.

The analysis of code in phases 1 through 5 is nearly complete. The final report of the analysis is due from the contractor on September 15, 1999. As of August 25, 1999 the contractor has reported a .005% error rate for phases 1 through 4 code and a .006% error rate for phase 5 code that has been reviewed.

#### 2. Independent Audit and Readiness Verification (IARV)

In July 1999, the CDC PO, in a joint effort with the End-User Computing Support Division and Telecommunications and Operations Division, instituted a series of Independent Audit and Readiness Verification (IARV) visits. Teams traveled to selected sites to assess Tier 2 (T2), Tier 3 (T3), Telecommunications and INOMS Year 2000 (Y2k) readiness. The IARV teams are scheduled to visit all of the service centers, the three computing centers, selected district and regional

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#### **Management Response to Draft Audit Report - The Internal Revenue Service's (IRS) Oversight of the Year 2000 Conversion Can Be Strengthened (Audit Number 19980091)**

offices, and Application System Projects (ASP) development sites. The initial T2 and T3 IARV reviews are scheduled to be completed by the end of August 1999. The IARV reviews will be extended to additional sites and expanded to include the Telecommunications Division. The corrective actions will be documented in a final report and will be tracked until completion.

#### 3. Physical Wall to Wall Reconciliation of the Inventory

In addition, the Telecommunications and Operations Division Office (IS:O:O) is conducting a physical wall to wall reconciliation of the inventory at the service centers, computing centers and selected critical district offices. This activity is scheduled to conclude in December 1999. This process addresses all hardware and associated COTS assets and will also ensure that all Treasury Communications System (TCS) equipment and software is accurately included on the inventory. The process includes Information System (IS) certifying the inventory at each site, once completed, and ensuring that the inventory is transferred to the site for maintenance.

#### 4. Audits of System Owner Sponsored End-to-End Tests

The CDC PO has initiated the audit of 10% of the System Owner Sponsored End-to-End Tests. The reviews, scheduled to be complete by December 1999, will be conducted to establish whether or not the system owner satisfactorily completed the requirements for End-to-End Testing.

5. The contractor Booz-Allen & Hamilton continues to conduct a risk assessment. The latest Risk Assessment report was provided to the CDC PO on June 25, 1999. All high-risk items are reported to the Combined Management Program for the Century Date Change and Filing Season Executive steering Committee, which is chaired by the IRS Commissioner.

#### 6. Follow-up on TIGTA/GAO Audits

The IRS utilizes the TIGTA and GAO audits, which independently identify weaknesses in the data provided to IRS.

#### 7. Executive Steering Committee Meetings, CDC Progress Meetings, Bi-weekly CDC Oversight Meetings and CDC Risk Meetings

The CDC PO conducts the following meetings exclusively to address Year 2000 issues: Executive Steering Committee Meeting (Commissioner's) Executive Steering Committee Meeting (Chief Information Officer's), weekly CDC Progress

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Meetings, bi-weekly CDC Oversight Meetings and CDC Risk Meetings. These meetings help the CDC PO to identify and resolve problems including problems with information in INOMS as well as other Y2k program management processes.

Implementation Date of Corrective Action #1

Completed:

Proposed: January 1, 2000

The CDC PO will complete the IV&V, IARV, Wall to Wall Inventory, E2E Audits, follow-up on TIGTA/GAO audits, and Continue to conduct ESC meetings, Weekly Progress Meetings and bi-weekly Oversight Meetings & Risk Meetings

Responsible Official for Corrective Action #1

Chief Information Office IS  
Deputy Chief Information Officer (Systems) IS  
Director, Century Date Change Project Office IS:CD

Corrective Action #1 Monitoring Plan

The CDC PO has and will continue to monitor the accuracy and reliability verification and validation through the means of the IV&V, IARV, Wall to Wall Inventory, E2E System Owner Testing Audits, follow-up on TIGTA/GAO audits, and ESC meetings, Weekly Progress Meetings and bi-weekly Oversight Meetings & Risk Meetings.



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### Attachment

#### **Management Response to Draft Audit Report - The Internal Revenue Service's (IRS) Oversight of the Year 2000 Conversion Can Be Strengthened (Audit Number 19980091)**

##### Recommendation #2

The CDC PO should develop a technique to identify interdependencies among events, activities and schedule slippage to allow it to better manage delays within the overall Year 2000 project.

##### Assessment of Cause

The project office oversees a large number of conversion and testing activities, many of which have interdependencies among them. With the large number of activities across many organizations and locations, impact of slippage of activities on others might not be apparent.

##### Corrective Action #2 General Comments

During the beginning days of the Year 2000 effort, the CDC PO developed an approach to monitor and control the workload. This consisted of dividing the various platforms into four tiers, Tier 1, 2, 3 and Telecommunications. The work was then distributed over five phases and later, as the need arose, extended to seven phases. A phase is a given period of time during which the century date change conversion work is to be accomplished. By distributing the work in this manner, the individual Tier owners are responsible to identify interdependencies among projects and events, and to monitor activities and schedule slippage.

Slippage in one activity may affect another activity. The processes identified below monitor any slippage. Any delay that affects the overall project is known and would be considered potentially catastrophic, such as budget shortfalls or widespread infrastructure implementation delays or changes. The CDC PO has not identified any situation in which the IRS could not take corrective action to address a slippage. The CDC PO believes that the processes below monitor in great detail all key milestones and activities, and will continue to address any slippage.

##### Corrective Action #2

The CDC PO implemented the following processes to address the identification and management of interdependencies among the conversion and testing activities. They are as follows:

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##### 1. Location Specific Deployment Schedule

The CDC PO coordinated the development of the Location Specific Deployment Schedule that is updated regularly and included on the CDC Intranet site. The Location Specific Deployment Schedule includes schedules for Integrated Submission Remittance Processing, Service Center Mainframe Consolidation, End-to-End Testing, On Site Systems Acceptability Testing, Telecommunications, Tier 2, Tier 3, Non-Information Technology, Composite Mail Processing System/Service Center Automated Mail Processing System (COMPS/SCAMPS) and schedules for all Service Centers, Computing Centers, and Regions.

##### 2. Mission-Critical and Non-Mission-Critical Applications and Selected Portions of the Infrastructure (the Infrastructure Matrix)

Each week since February 1999 the Service has issued reports on Mission-Critical and Non-Mission-Critical Applications and Selected Portions of the Infrastructure (the Infrastructure Matrix). The Infrastructure Matrix contains information about selected portions of the Tier 1, 2, 3 and Telecommunications infrastructure implementation dates as they relate to the applications systems. The Infrastructure Matrix also identifies the Year 2000 readiness of the Tier 1 and Tier 2 infrastructure. Weekly the CDC PO requests information from each organization to identify known infrastructure changes, risks related to the application system or infrastructure, and any changes to implementation dates.

##### 3. Meetings

Weekly progress meetings are held and attended by managers of the Information Systems organizations and Field and Customer organizations. At these meetings, multiple reports are presented and reviewed that monitor the conversion progress at all levels. This allows managers to become further aware of interdependency problems if they arise in a proactive rather than a reactive manner. For example, the CDC PO and Product Assurance are tracking infrastructure changes through the weekly progress meeting.

In addition to the weekly progress meetings separate oversight meetings are conducted to ensure that all intra Tier dependencies are addressed. The oversight meetings are conducted for INOMS, Tier 1, Tier 2, Tier 3, Telecommunications, External Trading Partners, End to End Testing and Contingency Management Planning.

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The bi-weekly CDC PO Risk Meetings have served as a useful mechanism to identify dependencies across Tiers. The Risk Meetings, attended by executives, managers and analysts from across Information System and customer organizations have resulted in the resolution of numerous issues involving interdependencies. For example, the Filing Season Project Office reported on the progress of requirements to the business and subsequently is reporting together with Product Assurance on the progress of Systems Acceptability Testing (SAT). The Integrated Project Schedule, which tracks key milestones for major Y2k projects is used to identify potential risks for the Combined Management Progress for the Century Date Change and Filing Season Executive Steering Committee.

#### Implementation Date of Corrective Action #2

##### Completed:

##### Proposed: January 1, 2000

The CDC PO will continue to monitor and manage interdependencies across the Year 2000 activities by using Location Specific Deployment Schedule, Mission-Critical and Non-Mission-Critical Applications and Selected Portions of the Infrastructure (the Infrastructure Matrix) and weekly Progress Meetings, bi-weekly Oversight Meetings, and Risk Meetings.

#### Responsible Official for Corrective Action #2

Chief Information Office IS  
Deputy Chief Information Officer (Systems) IS  
Director, Century Date Change Project Office IS:CD

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**Corrective Action #2 Monitoring Plan**

The CDC PO will monitor dependencies at weekly progress meetings, bi-weekly oversight and risk meetings and review implementation dates and risks identified in the Location Specific Deployment Schedule and the Infrastructure Matrix.

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#### **Management Response to Draft Audit Report - The Internal Revenue Service's (IRS) Oversight of the Year 2000 Conversion Can Be Strengthened (Audit Number 19980091)**

##### Recommendation #3

The CDC Project Office should continue to use the contractor to evaluate the waivers for impact on end-to-end testing and contingency planning.

##### Assessment of Cause

Due to the large number of application components and infrastructure being moved to phases 6 and 7, extra steps were needed to address the evaluation and determining of status for those waivers and assessment of the contingency risk status.

##### Corrective Action #3 General Comments

The CDC PO contracted with Booz-Allen & Hamilton to perform a one-time review of the early waivers, 1 through 186, looking for potential risk factors. The study concluded that waivers 1 through 186 have a low risk impact to the century date conversion effort and do not require contingency plans.

A team of SRA contractors analyzes all incoming waiver requests and recommends approval or denial. The waiver analysis process takes into account the movement of components to be retired after December 1999, components to be converted but not completed by January 1999, and new component development in phases 6 & 7. Before a waiver can be granted to move these components into a later phase, a risk analysis must be performed to determine the impact on End-to-End testing and the need for a contingency plan.

A second team of SRA contractors reviews the waiver requests for potential risk factors. This analysis is done after the approval or denial of a waiver. In order to expedite the process, an information gathering fact sheet has been developed. The fact sheet is now automatically sent to any project requesting a waiver to phase 7, for them to complete and return.

##### Corrective Action #3

The CDC PO will continue to use the contractor to evaluate the waivers for impact on end-to-end testing and contingency planning. In addition, the CDC PO is considering merging the two SRA teams in order to consolidate the process. All information necessary to determine approval or denial of the waiver, as well as to analyze the waiver request for potential risk requiring a contingency plan request memo to be issued, would be gathered at one time.

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Implementation Date of Corrective Action #3

Completed:

Proposed: October 1, 1999

The CDC PO will complete its  
assessment of the waiver  
process and implement changes.

Responsible Official for Corrective Action #3

Chief Information Office IS  
Deputy Chief Information Officer (Systems) IS  
Director, Century Date Change Project Office IS:CD

Corrective Action #3 Monitoring Plan

Two waiver reports are produced weekly, the "Y2k Assigned Waiver Request Report" and the "Unassigned Waiver Report". These reports keep track of the waiver requests that have been received in the CDC PO and their status. These reports are presented and discussed in the weekly Progress Meeting (described on page 7), and provide the necessary information to monitor progress in reviewing and determining final status of waiver requests.

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#### **Management Response to Draft Audit Report - The Internal Revenue Service's (IRS) Oversight of the Year 2000 Conversion Can Be Strengthened (Audit Number 19980091)**

##### Recommendation #4

The CDC Project Office should prioritize non-compliant systems and concentrate resources on the highest priority projects requiring contingency planning.

##### Assessment of Cause

A possibility exists that the remaining conversion and testing work may not all be completed by January 3, 2000.

##### Corrective Action #4 General Comments

The policy of the CDC PO is to address contingency planning and risk assessment needs for all projects in all phases, including phases 6 & 7, and not just a select few.

On August 16, 1999, the CDC PO initiated changes to the Contingency Plan Request Memorandum (CPRM) process. The changed actions include:

- Sending CPRMs to owners whose systems are not complete, rather than providing a 15% margin of grace to owners that are late, and conducting a detailed review of each waiver request;
- Replacing the burdensome IS contingency plan requirement with a fact sheet that captures key information that helps quantify system risk and impact on business process;
- Formalizing communication between system owners and business owners through a risk warning memorandum that includes these fact sheets; and
- Tracking business and system owner decisions and actions.

These changes are expected to result in increased timeliness, relevancy and amount of risk information received by the CDC PO and provided to business owners, a better utilization of CDC resources, and more focused business contingency plans. The new process prioritizes at several stages:

- The CDC PO conducts a monthly risk rating, which reviews information gathered from multiple sources to evaluate schedule, technical, programmatic and other risks related to each of the major IRS systems and subsystems. Each system is rated with a risk of 1 to 3, with 1 being the highest risk. Systems rated as 1 are compelled to generate the new fact sheets.

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- Since Phase 6 has passed, all systems that are not complete are being asked to generate fact sheets. To ensure that staff is available to track requests, review fact sheets when they come in, and provide limited assistance, these requests are being prioritized based on the number of milestones completed and whether the systems are mission critical or not.
- Business owners have a strong role in the prioritization process. They are notified of system risks and provided with fact sheets for each system at risk and are asked to decide whether to revise or add a contingency plan or whether no additional action is warranted.

#### Corrective Action #4

- The CDC PO will continue to use fact sheets to gather information in order to prioritize requests for waivers and to determine the need to revise or add a contingency plan or whether no additional action is warranted. This process assures an efficient use of the CDC PO's resources in tracking the progress of CPRM actions.

#### Implementation Date of Corrective Action #4

##### Completed:

Proposed: February 1, 2000

The CDC PO will continue to track the progress of CPRM actions.

#### Responsible Official for Corrective Action #4

Chief Information Office IS  
Deputy Chief Information Officer (Systems) IS  
Director, Century Date Change Project Office IS:CD

#### Corrective Action #4 Monitoring Plan

The CDC PO will continue to monitor contingency planning progress and activity through weekly progress reports, oversight meetings and the risk assessment process.