Audit Report

GUIDANCE FOR THE DOD YEAR 2000 QUARTERLY REPORT

Report No. 99-144 April 30, 1999

Office of the Inspector General
Department of Defense

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Acronyms

CIO	Chief Information Officer
OASD(C^3I)	Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
OMB	Office of Management and Budget
Y2K	Year 2000

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202

April 30, 1999

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE)

SUBJECT: Audit Report on Guidance for the DoD Year 2000 Quarterly Report (Report No. 99-144)

We are providing this report for information and use. Because this report contains no recommendations, no written comments were required, and none were received. Therefore, we are publishing this report in final form.

Questions on the report should be directed to Mr. John J. Jenkins at (703) 604-9088 (DSN 664-9088) (jjenkins@dodig.osd.mil) or Ms. Mary Lu Ugone at (703) 604-9049 (DSN 664-9049) (mugone@dodig.osd.mil). See Appendix B for the report distribution. The audit team members are listed inside the back cover.

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Report No. 99-144 **April 30, 1999**
(Project No. 9AS-0081)

Guidance for the DoD Year 2000 Quarterly Report

Executive Summary

Introduction. This report is one in a series of reports that the Inspector General, DoD, is issuing in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the year 2000 computing challenge.

Objectives. The overall audit objective was to evaluate whether DoD had made progress in improving the accuracy and reliability of year 2000 quarterly reports submitted to the Office of Management and Budget. Specifically, we followed up on Inspector General, DoD, Report No. 98-077, "Year 2000 Computing Problem Reports: August 1997 Report," February 18, 1998, which resulted in revised DoD year 2000 guidance, to determine whether the guidance helped with the compilation of the DoD Year 2000 Quarterly Report to the Office of Management and Budget. We also evaluated the internal reporting requirements that DoD used to monitor and oversee the DoD year 2000 efforts.

Results. Although we have noticed improvement since our 1997 audit, the November 1998 and February 1999 DoD Year 2000 Quarterly Reports to the Office of Management and Budget still contained inaccurate and unreliable data, largely because of the need for manual compilation of the report in compressed timeframes. The errors were not sufficiently numerous or material to distort overall DoD year 2000 conversion status, but some systems and organizations were omitted from the reports. In December 1998, the Senior Civilian Official, Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), updated the DoD Year 2000 Management Plan to reflect more comprehensive reporting requirements and automation of the compilation process starting in April 1999. The complete implementation of the revised guidance should further reduce the inaccuracies.

Management Comments. We provided a draft of this report on April 9, 1999. Because this report contains no recommendations, written comments were not required, and none were received. Therefore, we are publishing this report in final form.

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Background

Year 2000 Reporting Requirements. DoD Components are required to submit year 2000 (Y2K) reports to the Chief Information Officer (CIO), DoD, to satisfy both DoD and the Office of Management and Budget (OMB) requirements.

DoD Reporting Requirements. On March 12, 1997, the CIO issued the memorandum "Year 2000 Refined Reporting Requirements for DoD," which established minimum quarterly reporting requirements for Y2K assessment and progress across DoD. The purpose of the reporting requirements was to provide the CIO, DoD, and CIOs of DoD Components with the visibility necessary to ensure a thorough and successful transition to Y2K compliance for all systems. The information reported was intended to show the status of DoD Y2K efforts and was being used by the CIO, DoD, to perform oversight for DoD Y2K efforts. In April 1997, the Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (OASD[C^3I]) issued the DoD Year 2000 Management Plan, Version 1.0, which reiterated the information in the March 12, 1997, memorandum that the CIO, DoD, issued. Additional drafts issued after May 1997 stressed the importance of that information in meeting Y2K reporting requirements that OMB levied.

OMB Reporting Requirements. On May 7, 1997, OMB issued the "Memorandum on Computer Difficulties Due to the Year 2000 – Progress Reports." The purpose of the memorandum is to provide Y2K progress reports to Congress and the public. It requires heads of selected Government agencies to report on the status of Y2K efforts each quarter. Each agency had to report on mission-critical systems, including information on the number of systems that are Y2K compliant, being replaced, being repaired, and being retired.

Previous Reporting Audits. The accuracy and reliability of Y2K quarterly reports are an issue in Inspector General, DoD, Report No. 98-077, "Year 2000 Computing Problem Reports: August 1997 Report," February 18, 1998. The report states that the DoD Component quarterly reports were not complete or fully reliable because specific guidance for preparing quarterly reports was not formulated or formally disseminated. The report recommended that the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), in his role as the CIO, DoD, formally issue Y2K quarterly reporting guidance and procedures to DoD organizations, and it was agreed that a revised DoD Y2K Management Plan was the best method for formal distribution. The report also states that the Plan should include specific procedures for DoD Component Y2K reporting.

Reporting accuracy is also discussed in Inspector General, DoD, Report No. 98-147, "Year 2000 Certification of Mission-Critical DoD Information Technology Systems," June 5, 1998. The report states that DoD Components were not complying with Y2K certification criteria before reporting systems as compliant. It states that as a result of the lack of compliance, DoD management reported as Y2K compliant systems that had not been certified. The report also states that inappropriate reporting of systems as compliant could impede DoD from obtaining the necessary visibility to ensure a thorough and successful transition to Y2K compliance for all DoD systems. The report recommended that the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) take the following actions:

- issue to DoD Components clarified DoD Y2K certification requirements, to include specific verification and validation requirements, to be effective immediately;
- issue to DoD Components clear, firm Y2K quarterly reporting requirements; and
- develop guidance for the signature of the Deputy Secretary of Defense that directs DoD Components to establish oversight processes and procedures to effectively enforce the DoD requirements established in the other two recommendations.

The OASD(C^3I) concurred with the recommendations and made substantive changes to the DoD Y2K Management Plan, of which the first draft Version 2.0 was released in June 1998.

The Inspector General, DoD, Report No. 99-059, "Summary of DoD Year 2000 Conversion – Audit and Inspection Results," December 24, 1998, summarizes Y2K issues identified in General Accounting Office; Inspector General, DoD; and Army, Navy, and Air Force audit reports from August 1997 through December 1998. The report also includes information reported by the Inspector General, Navy, and the Inspector General, Marine Corps. The summary report includes a section on reporting. Overall, the report states that 79 of the 142 audit and inspection reports, reviews, and memorandums included in the summary discuss problems associated with reporting.

The Inspector General, DoD, Report No. 99-115, "Summary of DoD Year 2000 Audit and Inspection Reports II," March 29, 1999, summarizes Y2K issues identified in reports issued by the General Accounting Office; the Inspector General, DoD; the Inspector General, Navy; and the Army, Navy, and Air Force audit agencies from October 1998 through February 1999. The report states that DoD reported a substantial increase in the percentage of compliant mission-critical systems and systems that completed the renovation, validation, and implementation phases. The summary report states that 10 of the 43 audit and inspection reports, memorandums, and briefings summarized discussed problems with reporting.

During our review of the November 1998 DoD Y2K Quarterly Report to OMB, DoD Components were using the draft Version 2.0 of the DoD Y2K Management Plan as Y2K criteria. During our review of the February 1999 DoD Y2K Quarterly Report, DoD Components were using the December 1998 signed Version 2.0 of the DoD Y2K Management Plan.

Scope of the DoD Status Reports. The DoD reported to OMB on the status of 2,642 mission-critical systems in November 1998 and 2,387 mission-critical systems in February 1999.

Objectives

The overall audit objective was to evaluate whether DoD had made progress in improving the accuracy and reliability of Y2K quarterly reports submitted to OMB. Specifically, we followed up on Report No. 98-077, "Year 2000 Computing Problem Reports: August 1997 Report," February 18, 1998, which recommended revised DoD Y2K guidance, to determine whether the guidance helped with the compilation of the DoD Y2K Quarterly Report to OMB. We also evaluated the internal reporting requirements that DoD used to monitor and oversee the DoD Y2K efforts. See Appendix A for a discussion of the audit scope, methodology, and prior coverage.

Guidance for the DoD Year 2000 Quarterly Report

The November 1998 and February 1999 DoD Y2K Quarterly Reports to OMB, while improved over previous reports, still contained inaccurate and unreliable data, largely because of the need for manual compilation of the report in compressed timeframes. The November 1998 DoD Y2K Quarterly Report to OMB did not include some DoD Component Y2K reports, and some of the data that the DoD Components reported were not accurately incorporated into the November 1998 and February 1999 DoD Y2K Quarterly Reports to OMB. In December 1998, the Senior Civilian Official, OASD(C^3I), updated the DoD Y2K Management Plan to reflect more comprehensive reporting requirements and included automation of the compilation process starting in April 1999. The complete implementation of the revised guidance should further reduce the inaccuracies, which were not sufficiently numerous or material enough to distort overall DoD Y2K conversion status.

Review of the November 1998 DoD Y2K Quarterly Report to OMB

Inclusion of DoD Component Reports. At least three DoD Component Y2K reports were not included in the November 1998 DoD Y2K Quarterly Report to OMB. The OASD(C^3I) provided copies of the individual DoD Component Y2K quarterly reports for our review. Quarterly reports for the American Forces Information Service, the On-Site Inspection Agency, and the Defense Special Weapons Agency[1] were not among those reports submitted to the Office of the Secretary of Defense Y2K program office or included in the November 1998 DoD Y2K Quarterly Report to OMB. Therefore, at least 21 mission-critical systems were not reported. The Inspector General, DoD, report was submitted electronically and in a timely manner but was not included in the November 1998 DoD Y2K Quarterly Report to OMB. Although it was not included, the number of reported mission-critical systems was not affected because the Inspector General, DoD, did not report any systems as mission critical. We could not determine whether all other DoD Component reports were accounted for and included in the

[1] Effective October 1, 1998, the On-Site Inspection Agency, the Defense Technology Security Administration, and the Defense Special Weapons Agency merged to become the Defense Threat Reduction Agency. An October 28, 1998, electronic message from the Defense Threat Reduction Agency to the Office of the Secretary of Defense Y2K personnel stated that the Defense Threat Reduction Agency did not have an October 1998 quarterly report submission and would begin quarterly reporting in January 1999. The Defense Technology Security Administration submitted a quarterly report for October 1998, but DoD Component reports were not received for the On-Site Inspection Agency or the Defense Special Weapons Agency.

November 1998 DoD Y2K Quarterly Report to OMB because OASD(C^3I) personnel could not provide a list of DoD agencies and Components required to report quarterly in accordance with DoD guidelines. The revised DoD guidance described later in this report should remedy that condition.

Accuracy of Data Incorporated in the DoD Report. The November 1998 DoD Y2K Quarterly Report did not accurately reflect data that DoD Components reported. During our review, we compared data that DoD Components reported in their quarterly reports with data that DoD reported to OMB. Although we identified many differences between the reports submitted to DoD and the report that DoD submitted to OMB, few notable discrepancies pertained to mission-critical systems. For example, we found discrepancies in 5 out of 33 columns when we compared data reported in the Defense Information Systems Agency quarterly report with data that the Office of the Secretary of Defense reported to OMB. Those discrepancies concerned the number of systems already replaced and Y2K repair costs. OASD(C^3I) personnel stated that the individual DoD Component reports are compiled into the DoD Report, and when DoD Component reports are not submitted in a timely manner, the DoD Component's previous quarterly report data are used for the OMB report. In addition, OASD(C^3I) personnel stated that they do not have established procedures for following up with the DoD Components regarding untimely or inaccurate data. The revised DoD guidance described later in this report should remedy that condition.

Deputy Secretary of Defense Review. On December 2, 1998, the Deputy Secretary of Defense chaired a special session of the DoD Year 2000 Steering Group to review audit and inspection results, with emphasis on deficiencies in system status reports. The Deputy Secretary strongly affirmed the need for accurate and credible reporting.

Review of February 1999 DoD Y2K Quarterly Report to OMB

We reviewed the February 1999 DoD Y2K Quarterly Report to OMB to determine whether the accuracy and reliability issues addressed earlier in this report were corrected by the revised DoD guidance. DoD Component reports for the American Forces Information Service and the Defense Threat Reduction Agency (formerly the On-Site Inspection Agency, the Defense Special Weapons Agency, and the Defense Technology Security Administration) were received and included in the DoD Y2K Quarterly Report to OMB. We identified 40 discrepancies when we compared data reported in the DoD Components' quarterly reports with DoD Component

data that the Office of the Secretary of Defense compiled and reported to OMB[2]. The Office of the Secretary of Defense Y2K program office personnel explained that 36 of the discrepancies were created inadvertently by the Office of the Secretary of Defense Y2K program office personnel during the manual process of compiling data that the DoD Components reported into a consolidated DoD Report for OMB. The compilation had to be done in short timeframes. The remaining four discrepancies were minor cost issues that appear to be related to rounding. As a result, DoD reported to OMB $50,000 more in net costs than the DoD Components and agencies reported to the Office of the Secretary of Defense. Because most of the discrepancies that we identified resulted from errors made during the manual data consolidation process, we believed that they would be corrected in April 1999 when the Office of the Secretary of Defense was to discontinue manual data consolidation procedures and begin using the Office of the Secretary of Defense Y2K database for preparing the DoD Y2K Quarterly Report to OMB.

Revised Y2K Reporting Guidance

In December 1998, the Senior Civilian Official, OASD(C^3I), in the role of the CIO, DoD, updated the DoD Y2K Management Plan (the Plan) to reflect changes in Y2K reporting requirements. The revised Plan includes more comprehensive reporting guidance and revised some previous reporting requirements.

Comprehensive Reporting Guidance. The Plan includes more comprehensive reporting guidance than the previous version of the Plan and states that mission-critical and mission-essential systems would be reported and tracked in the DoD Y2K database. The Plan also states that the Services and Defense agencies should track their other systems as appropriate and are not required to report them in the DoD database. Section 8.1 of the revised Plan states that the Office of the Secretary of Defense is responsible for maintaining and updating the DoD database, but that the DoD Components are responsible for the quality of the data provided to the Office of the Secretary of Defense. The clarification removes previous ambiguity about OASD(C^3I) responsibility for the accuracy of the DoD Components' Y2K data and places responsibility with the DoD Components. Section 9.0 of the Plan, "Y2K Reporting Requirements," clarifies the monthly and quarterly Y2K reporting requirements and addresses the focus and format of each.

[2] Specifically, we compared data included in the February 1999 DoD Report spreadsheets found in the DoD Y2K Management Plan's Appendix A, "Mission Critical Systems"; Appendix C, "Interfaces"; Appendix O, "Cost Estimates"; and Appendix P, "Total Systems," with the equivalent data that the DoD Components reported to the Office of the Secretary of Defense.

Revised Quarterly Reporting Requirements. The Plan revised some previous reporting requirements, and Appendix L of the Plan includes the spreadsheets currently required for the DoD Components to provide quarterly reporting data to the Office of the Secretary of Defense. The Plan further states that DoD was to use the Y2K database for preparing the DoD Y2K Quarterly Report to OMB effective April 1999. Because the revisions of the Plan address the accuracy and reliability issues, this report makes no additional recommendations.

Conclusion

The revised DoD reporting guidance simplified reporting requirements by discontinuing the requirement to report nonmission-critical systems and clarified the OASD(C^3I) responsibility for the accuracy of the DoD Components' Y2K data. Because of the revised guidance clarification, we identified fewer discrepancies in the February 1999 DoD Y2K Quarterly Report to OMB than in the November 1998 DoD Y2K Quarterly Report. The discrepancies that we noted, while in some cases significant at the individual DoD Component level, were not numerous or material enough to distort overall DoD Y2K conversion status. When the OASD(C^3I) discontinues manual data consolidation procedures and begins to use the Office of the Secretary of Defense Y2K database for preparing the DoD Y2K Quarterly Report to OMB, we believe that the remaining discrepancies will be even further reduced.

Appendix A. Audit Process

This report is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the CIO, DoD, to monitor DoD efforts to address the Y2K computing challenge. For a listing of audit projects addressing the issue, see the Y2K web page on the IGnet at http://www.ignet.gov.

Scope

Work Performed. We reviewed the reports that DoD submitted to OMB for the seventh reporting quarter, ending October 15, 1998, and the eighth reporting quarter, ending January 15, 1999. We evaluated the accuracy and reliability of the reports by comparing them with the reports that DoD Components submitted to the CIO. We interviewed personnel within OASD(C^3I) who were responsible for issuing reporting guidance and collecting the Y2K information from the DoD Components and submitting the information to OMB. We evaluated the internal reporting requirements that DoD used to monitor and oversee the DoD Y2K efforts. We also reviewed external reporting requirements used as guidance for providing quarterly reporting progress on Y2K efforts to OMB.

DoD-Wide Corporate-Level Government Performance and Results Act Goals. In response to the Government Performance and Results Act, DoD has established 6 DoD-wide corporate-level performance objectives and 14 goals for meeting the objectives. This report pertains to achievement of the following objective and goal.

> **Objective:** Prepare now for an uncertain future. **Goal:** Pursue a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. **(DoD-3)**

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals.

- **Information Technology Management Functional Area. Objective:** Become a mission partner. **Goal:** Serve mission information users as customers. **(ITM-1.2)**

- **Information Technology Management Functional Area. Objective:** Provide services that satisfy customer information needs. **Goal:** Modernize and integrate Defense information infrastructure. **(ITM-2.2)**

- **Information Technology Management Functional Area. Objective:** Provide services that satisfy customer information needs. **Goal:** Upgrade technology base. **(ITM-2.3)**

General Accounting Office High-Risk Area. In its identification of risk areas, the General Accounting Office has specifically designated risk in resolution of the Y2K problem as high. This report provides coverage of that problem and of the overall Information Management and Technology high-risk area.

Methodology

Audit Type, Dates, and Standards. We performed this economy and efficiency audit from November 1998 through March 1999, in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. We did not use computer-processed data for this audit.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available upon request.

Management Control Program. We did not review the management control program related to the overall audit objective because DoD recognized the Y2K issue as a material management control weakness area in the FY 1998 Annual Statement of Assurance.

Prior Coverage

The General Accounting Office and the Inspector General, DoD, have conducted multiple reviews related to Y2K issues. General Accounting Office reports can be accessed over the Internet at http://www.gao.gov. Inspector General, DoD, reports can be accessed at http://www.dodig.osd.mil.

Appendix B. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
  Director, Defense Logistics Studies Information Exchange
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Under Secretary of Defense for Personnel and Readiness
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  Deputy Chief Information Officer and Deputy Assistant Secretary of Defense (Chief Information Officer Policy and Implementation)
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Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
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Inspector General, National Imagery and Mapping Agency
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  Office of Information and Regulatory Affairs
General Accounting Office
  National Security and International Affairs Division
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Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

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Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services

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House Committee on Appropriations
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House Committee on Armed Services
House Committee on Government Reform
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