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Management Division

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February 21, 1997

The Honorable Ben Nighthorse Campbell
Chairman
The Honorable Herbert Kohl
Ranking Minority Member
Subcommittee on Treasury and
General Government
Committee on Appropriations
United States Senate

The Honorable Jim Kolbe
Chairman
The Honorable Steny H. Hoyer
Ranking Minority Member
Subcommittee on Treasury, Postal Service,
and General Government
Committee on Appropriations
House of Representatives

This letter summarizes our January 31, 1997, briefing to your staffs on the status of (1) U. S. Customs Service efforts to implement recommendations we made in May 1996 on its information technology (IT) modernization effort¹ and (2) Customs' Automated Commercial Environment (ACE) initiative. We performed this follow-up in response to the September 28, 1996, appropriations conference report.² To determine Customs' progress in implementing our recommendations, we analyzed documents, plans, contracts, and procedures and discussed them with Customs officials. Our work was limited to developing and providing descriptive information. We did not independently verify ACE-related costs as reported by Customs. Our work was performed from

¹Customs Service Modernization: Strategic Information Management Must Be Improved for National Automation Program To Succeed (GAO/AIMD-96-57, May 9, 1996).

²House of Representatives Report 104-863.

November 1996 through January 1997, in accordance with generally accepted government auditing standards.

In 1993, the Congress enacted legislation that enabled Customs to streamline import processing through automation by establishing the National Customs Automation Program (NCAP).³ The legislation eliminated certain legislatively mandated paper requirements and specified critical functions that NCAP must provide, including the ability to electronically file import entries at remote locations and process drawback claims.⁴

The Customs Distributed Computing (CDC) 2000 project is an ongoing effort to select an enterprisewide architecture for Customs' automated information systems.⁵ In 1994, Customs undertook a major effort, known as ACE, that is planned to replace the Automated Commercial System—Customs' existing automated import system—with an integrated, automated information system for collecting, disseminating, and analyzing commercial data and ensuring the proper collection and allocation of revenue. ACE is to provide automated support to the redesigned trade compliance (import) process Customs is currently devising. The NCAP prototype, intended as the first operational demonstration of ACE, is planned to implement selected features of the NCAP legislation, beginning in August 1997.

Our May 1996 report noted that Customs' efforts to select an architecture and develop ACE, including the NCAP prototype, were vulnerable to failure because the agency was not effectively applying practices to mitigate the serious risks associated with an ambitious systems modernization effort. Consequently, we recommended that Customs

- assign responsibility for implementing NCAP requirements;
- identify and analyze its business requirements before selecting a target architecture;
- manage systems as investments; and

³This program was mandated in December 1993 by Public Law 103-182 (19 U.S.C. 1411 et seq.).

⁴Drawbacks are refunds of duties and taxes paid on imported goods that are subsequently exported or destroyed.

⁵An architecture is a blueprint to guide and constrain the development and evolution (i.e., maintenance) of a collection of related systems.

- ensure that systems under development adhere to Customs' own Systems Development Life Cycle (SDLC) policies, including security planning.⁶

GAO FOLLOW-UP

Customs agreed with our recommendations and has taken the following actions in response to each.

- Assign responsibility for implementing NCAP requirements: Customs has assigned overall, policy-level responsibility for implementing NCAP to the Trade Compliance Board of Directors, which is headed by the Assistant Commissioner, Office of Strategic Trade. Day to day responsibility for implementing NCAP is assigned to the Assistant Commissioner, Office of Information Technology, who is also the Chief Information Officer.
- Identify and analyze business requirements before selecting a target architecture: At the time of our May 1996 report, Customs had selected an architecture and was acquiring hardware, software, and telecommunications as part of CDC 2000. However, we reported that this approach was not adequately supported by an analysis of Customs' business requirements. In October 1996, Customs reconsidered this approach and refocused CDC 2000 on conducting the analyses needed to select the enterprisewide architecture on which ACE will run. As part of this new CDC 2000 project, Customs hired a contractor in January 1997 that is expected to conduct these analyses and recommend an architecture in June 1997. According to Customs officials, this recommendation is expected to consider the business requirements that Customs is identifying in its ongoing efforts to redesign its three core processes—trade compliance (import) processing, outbound or cargo processing, and passenger processing—and the information and data needed to meet those requirements. Further, the contractor is expected to consider alternative processing approaches and analyze the costs, benefits, and risks of each approach. The contractor is also expected to develop architecture-related policies and propose migration strategies to help Customs move from its current architecture to its target architecture.
- Manage systems as investments: An investment review board (IRB) was designated in February 1996. The Deputy Commissioner is chairman of the IRB. Other voting members are the Assistant Commissioner, Office of Field Operations; Assistant Commissioner, Office of Finance; Assistant Commissioner, Office of Information and Technology; and Deputy Assistant Commissioner, Office of Investigations. Advisory or nonvoting members include representatives from the Office of Planning, Budget Division, and Department of the Treasury. Customs has not yet established policies and

⁶SDLC policies specify a step-by-step process to deliver accurate, effective, and efficient automated systems to users.

procedures or implemented an investment review process. In November 1996, Customs hired a contractor to develop a plan to help bring the agency into compliance with the Clinger-Cohen Act,⁷ which includes a requirement to establish an investment review process. As of January 1997, Customs officials told us that they were in discussions with their contractor to plan the specific work needed to develop and implement an investment review process.

- Ensure that systems under development adhere to Customs' own SDLC policies, including security planning: In October 1996, Customs updated its SDLC policies to include new policies on software project planning and project management. The SDLC policy specifies that extensive project planning, including estimating the size of software products and estimating resource needs, should occur in initiating a project of the magnitude of ACE. Also, the SDLC policy requires that project plans include top-level management reviews and decisions at various stages and between various phases of development. Such reviews are important because they provide higher management with a basis for deciding whether the expenditure of resources for the next phase is justified. The ACE project plan, which also addresses the NCAP prototype, does not yet address these new requirements. Customs officials stated that ACE-related plans were approved by senior managers and that they are revising their project plan to conform to these new SDLC policies.

In mid-January 1997, the Assistant Commissioner, Office of Information Technology, assigned responsibility for SDLC enforcement to his information resources management division. This division established a schedule for SDLC compliance reviews; ACE is scheduled for review on October 15, 1997. These reviews are intended to promote compliance with the software development process and provide management with visibility into the development process. In addition, Customs prepared a security plan for ACE in July 1996. We did not have sufficient time to perform a detailed review of this plan.

STATUS OF ACE

Customs estimates that the development cost of ACE will be \$150 million over a 10-year life cycle. Between fiscal year 1994 and fiscal year 1996, Customs had obligated a reported \$32.8 million for ACE. With the exception of fiscal year 1994, in which approximately \$0.5 million was obligated, Customs plans to spend about \$15 million per year for ACE development. Although Customs has articulated broad goals for the trade compliance redesign initiative, to date

⁷The Omnibus Consolidated Appropriations Act, 1997, renamed both the Federal Acquisition Reform Act of 1996 and the Information Technology Management Reform Act of 1996 as the "Clinger-Cohen Act of 1996."

Customs has not documented specific goals and objectives for ACE or expressed how success will be measured. In addition, Customs' current project plan for ACE provides a detailed schedule for the NCAP prototype and some completion dates for subsequent development. However, it does not indicate any activity beyond fiscal year 2000, although Customs plans for some unspecified development to continue for another 3 years. The NCAP prototype is scheduled for implementation at three locations—Detroit, Laredo, and Port Huron—on August 1, 1997.

Customs plans to finish its NCAP prototype implementation plan that will describe implementation of NCAP beyond the initial three prototype sites by April 1, 1997. On January 31, 1997, the Assistant Commissioner, Office of Information and Technology, told us that Customs will develop an overall plan for ACE that includes cost and schedule information, goals and objectives, and success measures. He stated that this plan will be completed during summer 1997.

We discussed the contents of this letter with senior Customs officials and incorporated their views where appropriate. Overall, they agreed with the contents.

We are sending copies of this letter to the Secretary of the Treasury; the Commissioner of Customs; the Director, Office of Management and Budget; and interested agency officials. Copies will also be made available to others upon request. If you have any questions about this letter, please contact me or Debbie Davis, Assistant Director, at (202) 512-6240.



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