CUSTOMS SERVICE MODERNIZATION

Results of Review of First Automated Commercial Environment Expenditure Plan
June 5, 2001

The Honorable Ben Nighthorse Campbell
Chairman
The Honorable Byron L. Dorgan
Ranking Member
Subcommittee on Treasury and General Government
Committee on Appropriations
United States Senate

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

Pursuant to the U.S. Customs Service’s fiscal year 2001 appropriation,
Customs submitted to the Congress in March 2001 its first expenditure plan, requesting $45 million for its Automated Commercial Environment (ACE). ACE is intended to be Customs’ new import processing system and the first project under the Customs Modernization Program. As required by the act, we reviewed the expenditure plan. Our objectives were to (1) determine whether the plan satisfied the legislative conditions specified in the act, (2) determine whether the plan is consistent with our open recommendations, and (3) provide any other observations about the expenditure plan and Customs’ modernization.

On April 23, 2001, we briefed your offices on the results of this review. This report officially transmits the results of our work and our recommendations to the Commissioner of Customs. The full briefing, including our scope and methodology, is reprinted as appendix I. In summary, we made three major points:

- First, Customs’ expenditure plan satisfies the legislative conditions specified in the appropriations act, including (1) meeting the Office of

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1 The Consolidated Appropriations Act, 2001 (Public Law 106-554, dated December 21, 2000).
Management and Budget’s (OMB) capital planning and investment control review requirements; (2) complying with Customs’ enterprise architecture; ² (3) complying with federal acquisition rules, requirements, guidelines, and systems acquisition management practices; and (4) being reviewed by the Customs Investment Review Board,³ Treasury, and OMB.

- Second, activities described in the plan are consistent with our two open recommendations regarding the need for Customs to (1) justify and make ACE investment decisions incrementally and (2) strengthen ACE software acquisition management.

- Third, we observed two areas needing improvement. One, Customs has not adequately justified investing in the International Trade Data System (ITDS)⁴ pilot project in parallel with, and separate from, planned ITDS efforts under the ACE modernization. Two, Customs has defined conflicting roles and responsibilities for its independent verification and validation (IV&V)⁵ contractor.

Recommendations for Executive Action

To improve Customs’ ACE modernization management, we recommend that the Commissioner of the U.S. Customs Service direct the Chief Information Officer, as the modernization executive, to

- immediately transfer responsibility and accountability for the ITDS pilot to the ACE modernization program manager;
- include any plans for further investing in the ITDS pilot, including cost, benefit, and risk justification, in the next ACE expenditure plan; and
- clarify the ACE modernization IV&V agent’s roles and responsibilities to ensure that independence is not compromised.

² An enterprise architecture establishes the roadmap to achieving an agency’s mission through optimal performance of its core business processes within an efficient information technology environment.

³ Customs’ Investment Review Board makes information technology funding decisions on the basis of comparisons and trade-offs among competing project proposals.

⁴ ITDS is a system that Customs is acquiring for the governmentwide collection, use, and dissemination of trade data.

⁵ The purpose of independent verification and validation (IV&V) is to provide an independent review of system processes and products. The use of IV&V is a recognized best practice for large and complex systems development and acquisition projects. To be effective, IV&V must be performed by an entity that is independent of the processes and products that are being reviewed.
In commenting on a draft of this report, the Director, Office of Planning, U.S. Customs Service agreed with our findings and recommendations. The Director's written comments are reprinted in appendix II.

We are sending copies of this report to Senator Charles E. Grassley, Chairman, and Senator Max Baucus, Ranking Member, Senate Committee on Finance; and Representative William M. Thomas, Chairman, and Representative Charles B. Rangel, Ranking Minority Member, House Committee on Ways and Means. We are also sending copies of this report to the Honorable Paul H. O'Neill, Secretary of the Treasury; the Honorable Charles W. Winwood, Acting Commissioner of the U.S. Customs Service; and the Honorable Mitchell E. Daniels Jr., Director of OMB.

Should you or your staff have any questions on matters discussed in this report, please contact me at (202) 512-3439. I can also be reached by e-mail at HiteR@gao.gov. Key contributors to this report were Mark Bird, Madhav Panwar, Jamelyn Smith, and Aaron Thorne.

Randolph C. Hite
Director, Information Technology
Systems Issues
Appendix I
Results of Review of Customs’ First Automated Commercial Environment (ACE) Expenditure Plan

GAO
Results of Review of Customs’ First Automated Commercial Environment (ACE) Expenditure Plan

Briefing to Staffs of the
Subcommittee on Treasury and General Government
Senate Committee on Appropriations
and
Subcommittee on Treasury, Postal Service, and General Government
House Committee on Appropriations

April 23, 2001
Appendix I
Results of Review of Customs’ First
Automated Commercial Environment (ACE)
Expenditure Plan

Breifing Overview

- Introduction
- Objectives
- Scope and Methodology
- Background
- Results in Brief
- Results
- Conclusions
- Recommendations for Executive Action
- Appendix I
Appendix I
Results of Review of Customs’ First
Automated Commercial Environment (ACE)
Expenditure Plan

Introduction

- The Automated Commercial Environment (ACE) is intended to be Customs’ new import processing system.
- In February 1999 we reported\(^1\) that ACE suffered from serious management weaknesses, such as inadequate economic justification for investing in the proposed system solution and ineffective software management processes, and we recommended that Customs
  - rigorously analyze alternative approaches to building ACE, including satisfying some ACE requirements through Treasury’s International Trade Data System (ITDS);\(^2\)
  - justify and make ACE investment decisions incrementally; and
  - strengthen ACE software acquisition management.

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\(^1\) Customs Service Modernization: Serious Management and Technical Weaknesses Must Be Corrected (GAO/AIMD-99-41, February 26, 1999).

\(^2\) At the time of our report, ITDS was a system that Treasury was acquiring for the governmentwide collection, use and dissemination of trade data. Since then, responsibility for ITDS was transferred to Customs.
In response, Customs’ FY 2001 appropriations act (Public Law 106-554) provided $130 million for ACE, but stated that these funds may not be obligated until Customs submits to the Congress for approval an ACE expenditure plan that:

- meets OMB capital planning and investment control review requirements;
- complies with the Customs Service’s enterprise architecture;
- complies with federal acquisition rules, requirements, guidelines, and systems acquisition management practices;
- is reviewed and approved by the Customs Investment Review Board (IRB), Treasury, and OMB; and
- is reviewed by GAO.

Consistent with our open recommendation for incrementally investing in ACE, Customs plans to submit a series of expenditure plans seeking release of funds to acquire ACE.
Appendix I
Results of Review of Customs’ First
Automated Commercial Environment (ACE)
Expenditure Plan

On March 5 and 6, 2001, the House and Senate subcommittees, respectively, released to Customs $5 million in stopgap funding to sustain program activities until Customs submitted its first expenditure plan.

On March 26, 2001, Customs submitted its first expenditure plan to its House and Senate appropriations subcommittees seeking release of $45 million from the ACE appropriation.
Introduction (cont’d.)

Customs Fiscal Year 2001 ACE Appropriation - $130 Million

- Planned September 2001 $80 million expenditure plan
- March 2001 $5 million stopgap funding release
- March 26, 2001 $45 million expenditure plan
Objectives

As agreed, our objectives were to

- determine whether Customs’ first ACE expenditure plan dated March 26, 2001, satisfies the legislative conditions,
- determine whether the plan is consistent with our open recommendations, and
- provide any other observations about the expenditure plan and Customs modernization.

- We agreed to provide our results to the subcommittees on April 23, 2001.
To accomplish our objectives, we

- reviewed the expenditure plan and met with Customs program officials to understand the scope and content of the plan;
- analyzed the plan against the legislative conditions;
- assessed Customs’ actions for responding to our open recommendations to determine consistency and progress;
- reviewed ACE program management plans, reports, and briefings to clarify and ensure consistency with information in the expenditure plan;
- reviewed ITDS pilot management plans, reports, and briefings to understand its scope, approach, management structure, justification, status, and relationship to the ACE modernization; and
Scope and Methodology (cont’d.)

- interviewed ACE and ITDS program management officials to clarify information in plans, reports, and briefings.

- As agreed, to meet our reporting deadline we did not independently validate planned initiatives’ cost estimates or confirm the validity of Customs’ information on the initiatives’ content and progress.

- We provided a draft of this briefing on April 20, 2001, to Customs’ Chief Information Officer and incorporated his comments where appropriate.

- We performed our work from February through April 2001 in accordance with generally accepted government auditing standards.
Need to Modernize

- Customs forecasts a burgeoning trade workload without a commensurate increase in human capital resources.
- Customs relies on antiquated information systems and manual processes to document, inspect, and account for the movement and disposition of imported goods while collecting and accounting for the related revenues.
- We have testified that the need for Customs to modernize its import processing is undeniable because the existing import processing system (Automated Commercial System or ACS) is paper-intensive, error-prone, transaction-based, and out of step with the just-in-time inventory practices of the trade community.\(^3\)

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\(^3\)U.S. Customs Service: Observations on Selected Operations and Program Issues (GAO/T-GGD/AIMD-00-150, April 20, 2000).
Appendix I
Results of Review of Customs’ First
Automated Commercial Environment (ACE)
Expenditure Plan

Background
(cont’d.)

![Trade Workload & Human Resource Forecasts](image)

Source: U.S. Customs Service
## Proposed ACE Versus Existing ACS Functionality

<table>
<thead>
<tr>
<th>Required Functionality</th>
<th>ACS</th>
<th>ACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Filing</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Periodic Statements</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Periodic Payments</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Reduced Data Entry</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Reconciliation</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Streamlined Automated Manifests</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>National Account Management</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
<tr>
<td>Streamlined Billing, Collections, Refunds, Quota/Duty Filings</td>
<td>![Symbol]</td>
<td>![Symbol]</td>
</tr>
</tbody>
</table>

- ![Symbol] Fully Supported
- ![Symbol] Partially Supported
- ![Symbol] Marginally Supported

Source: U.S. Customs Service
Background (cont’d.)

- Customs strategy for replacing ACS and modernizing import processing is to employ a world-class systems integration PRIME contractor to deliver and deploy a system solution that meets Customs business needs.
- Customs plans to announce the PRIME contractor on April 25, 2001.
Background (cont’d.)

ITDS

- As part of the ACE modernization program, Customs plans to acquire ITDS, which is to provide importers a single interface to the many federal agencies that collect, use, and disseminate trade data, including Customs.

Without ITDS

Importer

Customs   FDA   DOT   INS   USDA   Others

With ITDS

Importer

ITDS

Customs   FDA   DOT   INS   USDA   Others
Background (cont’d.)

March 26, 2001, $45 Million Expenditure Plan Summary

<table>
<thead>
<tr>
<th></th>
<th>($000,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management</td>
<td></td>
</tr>
<tr>
<td>Field staff travel</td>
<td>$2.50</td>
</tr>
<tr>
<td>Software acquisition/development process improvement</td>
<td>$3.30</td>
</tr>
<tr>
<td>ACE prototype operations and maintenance</td>
<td>$2.50</td>
</tr>
<tr>
<td>Program management support contractor (Robbins-Gioia)</td>
<td>$4.05</td>
</tr>
<tr>
<td>Program management support contractor (MITRE)</td>
<td>$5.20</td>
</tr>
<tr>
<td>Support systems</td>
<td>$1.65</td>
</tr>
<tr>
<td>Program office space, equipment, and training</td>
<td>$0.80</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$20.00</strong></td>
</tr>
<tr>
<td>Prime contractor modernization tasks</td>
<td>$25.00</td>
</tr>
<tr>
<td><strong>Total requested release</strong></td>
<td><strong>$45.00</strong></td>
</tr>
</tbody>
</table>

*Additional information on Customs’ expenditure plan is provided in appendix I.*
Appendix I
Results of Review of Customs’ First
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Expenditure Plan

Results in Brief

• Objective 1: Customs’ expenditure plan satisfies the legislative conditions.

<table>
<thead>
<tr>
<th>Legislative Conditions</th>
<th>Satisfies</th>
<th>Does Not Satisfy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meets OMB capital planning and investment control review requirements</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Complies with the Customs Service’s enterprise architecture</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Complies with federal acquisition rules, requirements, guidelines, and systems acquisition management practices</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Is reviewed and approved by the Customs investment review board (IRB), Treasury, and OMB</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Is reviewed by GAO</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

• Objective 2: The expenditure plan is consistent with open GAO recommendations.\(^5\)

<table>
<thead>
<tr>
<th>Recommendation Summary</th>
<th>Consistent</th>
<th>Inconsistent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justify and make investment decisions incrementally</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Strengthen ACE software acquisition management</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

\(^5\)GAO closed its recommendation that Customs analyze alternative approaches to building ACE, including ITDS, when responsibility for ITDS was transferred from Treasury to Customs.
Objective 3: Other observations

Observation 1: Customs is investing in an ITDS pilot project in parallel with, and separate from, planned ITDS efforts under the ACE modernization.
  • Supporting ACE program management documents provide for acquiring and implementing ITDS as part of ACE.
  • Nevertheless, Customs has underway, separate from the ACE modernization program, an ITDS pilot system acquisition and implementation effort.
  • Customs has not adequately justified its ongoing efforts and plans for its ITDS pilot effort.

Observation 2: Customs has defined conflicting roles and responsibilities for its independent verification and validation (IV&V) contractor.
Appendix I
Results of Review of Customs’ First
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Objective 1: The expenditure plan satisfies the legislative conditions.

<table>
<thead>
<tr>
<th>Legislative Conditions</th>
<th>Satisfies Conditions</th>
<th>Expenditure Plan Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Meets OMB capital planning and investment control review requirements.</td>
<td>✓</td>
<td>The expenditure plan was reviewed and approved by the Customs IRB, the executive management team that makes capital funding decisions. The framework for these funding decisions is Customs’ investment management process, which we determined meets OMB’s capital planning and investment control review requirements as outlined in OMB Circular A-130, “Management of Federal Information Resources.”</td>
</tr>
<tr>
<td>2. Complies with the Customs Service’s enterprise architecture.</td>
<td>✓</td>
<td>The expenditure plan seeks initial funding for ACE, which we verified that Customs determined to be in compliance with its enterprise architecture.</td>
</tr>
<tr>
<td>3. Complies with federal acquisition rules, requirements, guidelines, and systems acquisitions management practices.</td>
<td>✓</td>
<td>Customs has formulated plans and assigned responsibilities for implementing Software Engineering Institute Software Acquisition Capability Maturity Model® key process areas. If implemented effectively, these processes should meet federal acquisition rules, regulations, and practices.</td>
</tr>
</tbody>
</table>

6Capability Maturity Model® is a service mark of Carnegie Mellon University, and CMM® is registered in the U.S. Patent and Trademark Office.
### Objective 1 (cont’d)

<table>
<thead>
<tr>
<th>Legislative Conditions</th>
<th>Satisfies Conditions</th>
<th>Expenditure Plan Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Is reviewed and approved by the Customs IRB, Treasury, and OMB.</td>
<td>✔</td>
<td>Customs’ IRB approval was given on January 19, 2001. Treasury approval was given on February 6 (for everything but the three initial ACE tasks) and on March 9, 2001 (for the three initial ACE tasks). OMB approval was given on February 23 (for everything but the three initial ACE tasks) and on March 22, 2001 (for the three initial ACE tasks)</td>
</tr>
<tr>
<td>5. Is reviewed by GAO.</td>
<td>✔</td>
<td>Our review was completed on April 23, 2001</td>
</tr>
</tbody>
</table>
### Objective 2: The plan is consistent with our open ACE recommendations.

<table>
<thead>
<tr>
<th>GAO Recommendation</th>
<th>Consistent</th>
<th>Actions Planned or Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justify and make investment decisions incrementally, and for each increment:</td>
<td>✔</td>
<td>Customs ACE expenditure plan and supporting documents describe an incremental approach to investing in ACE that entails:</td>
</tr>
<tr>
<td>use disciplined investment processes;</td>
<td></td>
<td>- compliance with Customs’ investment management process;</td>
</tr>
<tr>
<td>prepare realistic and supportable benefit expectations;</td>
<td></td>
<td>- preparation of cost/benefit analyses and independent validation of the estimated costs and benefits for each ACE increment;</td>
</tr>
<tr>
<td>require a favorable return on investment and compliance with Customs’ architecture</td>
<td></td>
<td>- requirements for a positive return on investment and compliance with Customs’ enterprise architecture, as required by Customs’ investment management process;</td>
</tr>
<tr>
<td>before making an investment decision;</td>
<td>✔</td>
<td>- validation of actual costs and benefits as determined in post-implementation reviews.</td>
</tr>
<tr>
<td>and validate actual costs and benefits once an increment is piloted.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Strengthen ACE software acquisition management by:                                   | ✔          | Customs ACE expenditure plan includes funds to continue software acquisition process improvement efforts including establishment of a software process improvement program and correction of weaknesses in ACE software acquisition processes and demonstration of progress toward bringing ACE processes to at least Software Engineering Institute CMM level 2. Customs instituted a policy requiring CMM level 2 processes of all software contractors, and is requiring that its prime modernization contractor maintain level 3 processes. |
| establish an effective process improvement program and correcting the weaknesses in   |            |                                                                                                                                                       |
|  ACE software acquisition processes identified in this report thereby bringing ACE    |            |                                                                                                                                                       |
|  processes to at least Software Engineering Institute CMM level 2; and                |            |                                                                                                                                                       |
|  requiring at least CMM level 2 processes of all ACE software contractors.           | ✔          |                                                                                                                                                       |

*CMM level 2 is the second level on the Software Engineering Institute’s five-level scale and means that an organization has the software acquisition rigor and discipline to repeat project successes.*
Objective 3: Other observations about the expenditure plan and the modernization program.

Observation 1: Customs is investing in an ITDS pilot project in parallel with, and separate from, ITDS efforts under the ACE modernization program.

- Supporting ACE program management documents include acquisition of ITDS as an integral part of the PRIME contractor’s activities. For example, one of the initial contractor tasks includes defining ITDS requirements as part of defining ACE requirements.
In addition, however, Customs is in the process of acquiring and implementing an ITDS pilot system. This pilot is being pursued concurrent with the ACE modernization program, but separate from the first expenditure plan, the ACE modernization program office, and the first PRIME contractor task orders.

The ITDS pilot is being managed by the Customs’ Software Development Division, is scheduled to be fielded at Buffalo, NY in June 2001, and is to be integrated with the existing ACE prototype system.

Fiscal year 2001 funding for ITDS is $5.4 million.

According to Customs officials, the ITDS pilot is intended to help:

- demonstrate the ITDS/ACE integration feasibility,
- facilitate understanding of ITDS requirements,
- build credibility with federal agencies and importers, and
- maintain momentum toward implementing an operational version of ITDS as part of the ACE modernization.
Beyond these stated reasons, Customs officials did not provide any analysis of the ITDS pilot’s costs, benefits, and risks that justify separately investing in it, notwithstanding the fact that its strategy is to hire a PRIME contractor to deliver a system solution to its ACE/ITDS requirements. Moreover, the reasons that Customs cited are not compelling because

- the pilot is to be integrated with the ACE prototype system and this prototype’s physical architecture includes dated technology (e.g., COBOL-based mainframe applications) and thus is not likely to be the architecture used by the PRIME contractor in engineering the operational ACE system solution;
- understanding and identifying ACE, including ITDS, requirements is a task the PRIME contractor will be asked to perform; and
• building credibility and maintaining momentum are vague and ambiguous bases for justifying additional investment in ITDS beyond already executed task orders.

• Without a more compelling analytical basis for investing in the ITDS pilot, further spending on it beyond Customs’ current contractual obligation risks unwise use of funds.
Observation 2: Customs has defined conflicting roles and responsibilities for its independent verification and validation (IV&V) contractor.

- The purpose of IV&V is to provide an independent review of system processes and products. The use of IV&V is a recognized best practice for large and complex system development and acquisition projects, like ACE.
- To be effective, the IV&V function must be performed by an entity that is independent of the processes and products that are being reviewed.
- However, Customs plans to use its IV&V agent (MITRE) to also perform some of the activities that the IV&V agent is to be responsible for reviewing.
- Thus, Customs will not have an independent review of critical modernization activities, such as program management.
### Roles and Responsibilities for MITRE

<table>
<thead>
<tr>
<th>Role and Responsibility</th>
<th>Program Responsibility</th>
<th>IV&amp;V Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Planning</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Budgeting</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program Management</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Project Management</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Requirements Definition</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Requirements Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Management Decisions</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Engineering</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Integration</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Acceptance Testing</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Deployment</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Transition Management</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Performance Management</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Audit and Evaluation</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

- Customs’ first ACE expenditure plan satisfies the legislative conditions and is consistent with our open recommendations. In our view, it constitutes a reasonable first step to a complex, long-term modernization program.
- Nevertheless, opportunities for improvement exist because the plan
  - excludes relevant system investment activities pertaining to ITDS and allows these activities to proceed outside of the scope of the modernization program without an analytically justified basis for doing so, and
  - provides for conflicting roles and responsibilities for the modernization program’s IV&V agent.
To improve Customs ACE modernization management, we recommend that the Commissioner direct the Chief Information Officer, as the Modernization Executive, to:

- Immediately transfer responsibility and accountability for the ITDS pilot to the ACE modernization program manager.
- Include any plans for further investing in the ITDS pilot, including cost, benefit, and risk justification, in the next ACE expenditure plan.
- Clarify the ACE modernization IV&V agent’s roles and responsibilities to ensure independence is not compromised.
In commenting on a draft of this briefing, the Customs Chief Information Officer agreed with our findings, conclusions, and recommendations.
### Appendix I

### Additional Information on Expenditure Plan

<table>
<thead>
<tr>
<th>Program Management</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field staff travel</td>
<td>Relocation of field personnel to the Washington area to aid in setting ACE requirements</td>
</tr>
<tr>
<td>Software development / acquisition process improvement</td>
<td>Enhancing enterprise-wide management processes</td>
</tr>
<tr>
<td>ACE prototype operations and maintenance</td>
<td>Sustaining contractors to support the ACE pilot in Detroit and Port Huron, Michigan; and Laredo, Texas</td>
</tr>
<tr>
<td>Program management support contractor (Robbins-Gioia)</td>
<td>Robbins-Gioia provides support in management process development, budgeting, expenditures tracking, requirements and configuration management, communications, and contractor administration</td>
</tr>
<tr>
<td>Program management support contractor (MITRE)</td>
<td>MITRE provides support in planning and analysis, systems architecture and engineering, management capability maturity, and IV&amp;V of prime work products</td>
</tr>
<tr>
<td>Support systems</td>
<td>Analysis, acquisition, and development of systems to interface with prime contractor to manage the modernization program</td>
</tr>
<tr>
<td>Program office</td>
<td>Collocation of Customs and contractor staffs, as well as office systems and training</td>
</tr>
</tbody>
</table>
### Initial Modernization Contractor Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish and maintain a management office with all of the necessary policies, procedures, and support structure to manage the modernization initiative. This includes planning, implementing, and managing at both the program and project levels.</td>
<td></td>
</tr>
<tr>
<td>Establish and maintain the logical and conceptual design of the infrastructure and services required for implementing ACE. This includes updating and maintaining various systems engineering documents such as the Customs Enterprise Life Cycle Model, the Customs Enterprise Architecture, and the Technical Reference Model.</td>
<td></td>
</tr>
<tr>
<td>Develop a set of top-level ACE functional requirements, including all ITDS requirements, based on the knowledge and experience provided by subject matter experts from various offices within Customs. These requirements will be translated by the prime contractor into a comprehensive ACE project plan that outlines the transition from the current ACS to the target ACE system. The transition will occur through a series of projects that will incrementally build on ACE functionality.</td>
<td></td>
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*Cost details for contractor tasks are procurement sensitive and are therefore not provided in this briefing.*
Appendix II

Comments From the U.S. Customs Service

U.S. Customs Service

Memorandum

DATE: May 18, 2001
FILE: AUD-1-OP MD

MEMORANDUM FOR RANDOLPH C. HITE
U.S. GENERAL ACCOUNTING OFFICE

FROM: Director,
Office of Planning

SUBJECT: Draft Audit Report on the United States Customs
Service's Automated Commercial Environment
Expenditure Plan

Thank you for providing us with a copy of your draft report entitled
"Customs Service Modernization: Results of Review of First Automated
Commercial Environment Expenditure Plan" and the opportunity to
discuss the issues in this report.

Customs concurs with the findings and has taken steps to address the
issues identified during your review. These steps, and additional on-
going actions, are outlined in the attached document.

If you have any questions regarding these comments, please contact Ms.
Michele Donahue at (202) 527-0957.

William F. Riley

Attachment

Tradition

* Service

* Honor
Appendix II  
Comments From the U.S. Customs Service 

U.S. CUSTOMS SERVICE 
GAO Review of First Automated Commercial Environment Expenditure Plan 

ITDS Concerns 

GAO Recommendations: 
To improve Customs ACE modernization management, we recommend that the Commissioner direct the Chief Information Officer, as the Modernization Executive, to: 

- Immediately transfer responsibility and accountability for the ITDS pilot to the ACE modernization program manager. 
- Include any plans for further investing in the ITDS pilot, including cost, benefit, and risk justification, in the next expenditure plan. 

Customs Response: 

- The Assistant Commissioner for the Office of Information and Technology signed a memorandum effective May 2, 2001 that transferred all ITDS program management and COTR responsibilities from the Software Development Division (SDD) to the Customs Modernization Office (CMO). 
- The CMO will ensure an integrated approach to program management of ACE and ITDS. 
- In Task Order 3 for the Prime Integration Contractor (PIC), the scope of all requirements, architecture, and business results activities is required to include both Trade Compliance (i.e., ACE) and ITDS. The PIC will establish integrated business and build-to requirements for ACE/ITDS. In subsequent task orders, the PIC will be accountable for the development and implementation of an integrated ACE/ITDS system. 
- The CMO has been established to manage a portfolio of modernization projects. Initially, each project will have separate justifications and appropriations. However, the CMO will integrate the costs and benefits of the individual projects in the expenditure plan. As a result, future versions of the expenditure plan will include costs, benefits, and risk justifications for ITDS.
U.S. CUSTOMS SERVICE
GAO Review of First Automated Commercial Environment
Expenditure Plan

IV&V Concerns

GAO Recommendation:

To improve Customs ACE modernization management, we recommend that the Commissioner direct the Chief Information Officer, as the Modernization Executive, to:

- Clarify the ACE modernization IV&V agent's roles and responsibilities to ensure that independence is not compromised.

Customs Response:

- The Assistant Commissioner for the Office of Information and Technology concurs with this finding and will craft and implement a plan to clarify the IV&V agent's role and responsibilities to ensure that independence is not compromised.
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