



*Changing Excise Files Information Retrieval  
System Development Requirements Resulted  
in Increased Costs and Schedule Delays*

**June 30, 2009**

**Reference Number: 2009-20-093**

This report has cleared the Treasury Inspector General for Tax Administration disclosure review process and information determined to be restricted from public release has been redacted from this document.



TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

June 30, 2009

**MEMORANDUM FOR CHIEF TECHNOLOGY OFFICER**

**FROM:**

*Michael R. Phillips*  
Michael R. Phillips  
Deputy Inspector General for Audit

**SUBJECT:**

Final Audit Report – Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays (Audit # 200820032)

This report presents the results of our review to determine whether the Internal Revenue Service (IRS) and its contractors are making improvements to the Excise Files Information Retrieval System (ExFIRS) using sound systems development practices and to follow up on prior ExFIRS findings. This review was part of our annual audit plan coverage under the major management challenge of Modernization of the IRS.

*Impact on the Taxpayer*

In late 1998, the IRS began developing the ExFIRS to improve motor fuel excise tax compliance and identify and reduce fraud. The IRS has spent more than \$108 million to develop the ExFIRS, and in April 2006 began using it to perform data matching to identify potential noncompliant taxpayers. However, changing system requirements resulted in increased costs of almost \$2.8 million and delayed implementation of the first phase of the ExFIRS modernization by 1 year. Improvements are needed to help ensure that continued ExFIRS development is efficient and effective at identifying and reducing motor fuel tax evasion.

*Synopsis*

The IRS is developing and maintaining the ExFIRS, which was mandated by Congress<sup>1</sup> as a result of motor fuel excise tax evasion schemes perpetrated by organized crime syndicates in the late 1980s and early 1990s. Motor fuel excise taxes are the major source of funding for the

---

<sup>1</sup> Pub. L. No. 105-178, 112 Stat. 107 (1998).



## *Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

Highway Trust Fund.<sup>2</sup> Since June 1998, Congress has appropriated almost \$88 million in Highway Trust Fund monies to develop the ExFIRS and expand enforcement efforts on noncompliant taxpayers. In addition, through 2004 the IRS had spent approximately \$20 million of its own funds for the development and implementation of the ExFIRS. In October 2006, the IRS completed transitioning the system development and operations and maintenance of the ExFIRS from the Small Business/Self-Employed Division to the Modernization and Information Technology Services organization.

The IRS has taken actions to improve system development effectiveness and address concerns identified in our prior audit report.<sup>3</sup> These actions include elevating the ExFIRS to a major information technology investment; ensuring the ExFIRS Project Office updates and completes appropriate project management documents; and ensuring the ExFIRS Project Office includes measurable performance standards in statements of work, clearly defines deliverables, and implements an effective plan for monitoring contractor performance.

While actions have been taken, additional improvements are needed to ensure more efficient and effective system development. For example, in October 2007, the ExFIRS Project Team began a modernization upgrade of two of the six ExFIRS subsystems<sup>4</sup> using the Tax Exempt and Government Entities Division's Reporting and Examination System (TREES) Compliance Case Management System as the platform. The decision to use the TREES was based on a recommendation from a study conducted by the Unisys Corporation. However, in February 2008, Small Business/Self-Employed Division Excise Tax Program personnel saw a demonstration of the new Large and Mid-Size Business Division's Issue Management System and recommended that consideration be given to moving the two ExFIRS subsystems to this new platform. The Unisys Corporation study provided a detailed analysis comparing the TREES capabilities and functionality to the requirements for the ExFIRS modernization, but did not provide a similar analysis of the Issue Management System. The Unisys Corporation stated in its report that insufficient information and time were available to complete a detailed study of the then current Issue Management System. In addition, the Unisys Corporation study was not extended to allow for an analysis of the new version of the Issue Management System.

In April 2008, the IRS hired the MITRE Corporation to conduct a study to determine whether the new version of the Issue Management System was a better platform than the TREES platform. The MITRE Corporation study concluded that both platforms technically met the user requirements, but stated that Small Business/Self-Employed Division Excise Tax Program personnel were skeptical that the TREES could support their processes. In August 2008, IRS executives approved the migration of the two ExFIRS subsystems to the Issue Management

---

<sup>2</sup> See Appendix VII for a glossary of terms.

<sup>3</sup> *The Excise Files Information Retrieval System Has Not Been Effectively Implemented* (Reference Number 2006-20-001, dated October 18, 2005).

<sup>4</sup> See Appendix VI for a description of the subsystems.



## *Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

System platform. The MITRE Corporation study did not include an explanation of why the Issue Management System was the preferred system, and Small Business/Self-Employed Division Excise Tax Program management did not respond to our repeated requests for details on what features or functionality made the new Issue Management System a better solution than the previously approved TREES platform. The decision to move ExFIRS modernization development to the Issue Management System increased the costs by almost \$2.8 million and delayed implementation by 1 year.

Improvements are also needed to ensure the completeness and accuracy of reported actual system development costs. The actual amounts spent on ExFIRS modernization in Fiscal Years 2006 and 2007 that were reported to the Reporting Compliance Executive Steering Committee did not match the amounts shown in the ExFIRS Budget by Fiscal Year and Release. In addition, the total costs reported for Fiscal Years 2006 through 2008 decreased by approximately \$1.77 million between the October 2008 and January 2009 reports.

### *Recommendations*

The Chief Technology Officer should ensure that 1) all future system redesign alternatives are adequately considered before final alternative selection, and 2) the processes for collecting, computing, verifying, and reporting financial data are clearly understood and followed by Project Office personnel so that the information reported is accurate and can be relied upon when making project decisions.

### *Response*

IRS management agreed with our recommendations and plans to take corrective actions including reemphasizing the importance and requirement of completing an alternatives analysis when making an alternative selection for new investments, with the involvement of the architecture and engineering organization. Also, the Modernization and Information Technology Services organization will review procedures and processes in place for collecting, computing, verifying, and reporting financial data and develop mechanisms to ensure accuracy when reporting the data. Management's complete response to the draft report is included as Appendix VIII.

Copies of this report are also being sent to the IRS managers affected by the report recommendations. Please contact me at (202) 622-6510 if you have questions or Margaret E. Begg, Acting Assistant Inspector General for Audit (Security and Information Technology Services), at (202) 622-8510.



---

*Changing Excise Files Information Retrieval System Development  
Requirements Resulted in Increased Costs and Schedule Delays*

---

## *Table of Contents*

<b>Background</b> .....	Page 1
<b>Results of Review</b> .....	Page 4
Progress Has Been Made in Further Developing the Excise Files Information Retrieval System.....	Page 4
Changing System Requirements Resulted in Increased Costs and Schedule Delays .....	Page 5
<u>Recommendation 1</u> :.....	Page 6
Processes for Collecting and Reporting System Development Costs Need Improvement .....	Page 6
<u>Recommendation 2</u> :.....	Page 8
<b>Appendices</b>	
Appendix I – Detailed Objectives, Scope, and Methodology.....	Page 9
Appendix II – Major Contributors to This Report.....	Page 11
Appendix III – Report Distribution List .....	Page 12
Appendix IV – Outcome Measures.....	Page 13
Appendix V – Prior Audit Report Recommendations Relating to Systems Development and Associated Corrective Actions Completed .....	Page 15
Appendix VI – Subsystems of the Excise Files Information Retrieval System.....	Page 17
Appendix VII – Glossary of Terms .....	Page 18
Appendix VIII – Management’s Response to the Draft Report .....	Page 20



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

## *Abbreviations*

ExFIRS	Excise Files Information Retrieval System
FHWA	Federal Highway Administration
IRS	Internal Revenue Service
MITIS	Modernization and Information Technology Services
TREES	Tax Exempt and Government Entities Division's Reporting and Examination System



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

## *Background*

The Department of the Treasury charges the Internal Revenue Service (IRS) with the enforcement of all Federal taxes. Within the IRS, the Division of Specialty Taxes under the Small Business/Self-Employed Division is charged with motor fuel excise tax compliance. The Modernization and Information Technology Services (MITS) organization is charged with developing the Excise Files Information Retrieval System (ExFIRS). Partnering with the IRS, the Federal Highway Administration (FHWA) is responsible for stewardship of the Federal Highway Trust Fund<sup>1</sup> and administration of its motor fuel tax evasion program, to include system development-related activities. Motor fuel excise tax receipts total \$30 billion to \$40 billion annually and are an important source of Federal and State revenues for our nation's transportation system. These monies are the major source of funding for the Highway Trust Fund, accounting for almost 90 percent of Highway Trust Fund receipts.

***Since June 1998, Congress has appropriated almost \$88 million in Highway Trust Fund monies to develop an excise fuel reporting system.***

The IRS is developing and maintaining the ExFIRS, which was mandated by Congress as a result of motor fuel excise tax evasion schemes perpetrated by organized crime syndicates in the late 1980s and early 1990s. Since June 1998, Congress has appropriated almost \$88 million in Highway Trust Fund monies to develop the ExFIRS and expand enforcement efforts on noncompliant taxpayers.<sup>2</sup> In addition, through 2004 the IRS had spent approximately \$20 million of its own funds for the development and implementation of the ExFIRS. The current ExFIRS development effort is funded solely by the FHWA with Highway Trust Fund monies. Figure 1 provides a breakdown of the almost \$88 million appropriated from the Highway Trust Fund for ExFIRS development efforts.

---

<sup>1</sup> See Appendix VII for a glossary of terms.

<sup>2</sup> See our audit report, *The Fuel Excise Tax Compliance Program Has Made Significant Progress, but Program Improvements Are Needed to Increase Highway Trust Fund Revenue* (Reference Number 2009-20-051, dated March 30, 2009), for the results of our review of the ExFIRS' effect on the compliance program.



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

**Figure 1: ExFIRS Information Technology Development Appropriations (Fiscal Years 1999–2009)**

<b>Fiscal Year(s)</b>	<b>Highway Trust Fund</b>	<b>IRS Funds</b>	<b>Totals</b>
1999–2004*	\$39,897,755	\$20,000,000	\$59,897,755
2005**	\$3,600,000	\$0	\$3,600,000
2006**	\$34,800,000	\$0	\$34,800,000
2007**	\$42,300,000	\$0	\$42,300,000
2008**	\$0	\$0	\$0
2009**	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Subtotal	\$120,597,755	\$20,000,000	\$140,597,755
Funds Used for Excise Tax E-File and Compliance System	<u>(\$32,400,000)</u>	<u>\$0</u>	<u>(\$32,400,000)</u>
<b>Total ExFIRS Development and Operations and Maintenance</b>	<b>\$88,197,755</b>	<b>\$20,000,000</b>	<b>\$108,197,755</b>

Source: Treasury Inspector General for Tax Administration report, *The Excise Files Information Retrieval System Has Not Been Effectively Implemented* (Reference Number 2006-20-001, dated October 18, 2005), and the January 2006 Memorandum of Understanding between the Department of Transportation and the IRS.

\* Actual expenditures.

\*\* Figures from the IRS Spend Plan. The Spend Plan provides the amount of annual funding to be received from the Highway Trust Fund. The funds are available for multiple years, and all of the funds will be spent by the end of Fiscal Year 2009.

In late 1998, the IRS began developing the ExFIRS to improve motor fuel excise tax compliance and identify and reduce fraud, and in April 2006, it began using the ExFIRS to perform data matching to identify potential noncompliant taxpayers. The ExFIRS is comprised of six subsystems that support the collection of motor fuel industry information. It is used to conduct automated analysis of this information to identify areas with the highest risk for nonpayment of motor fuel excise tax liabilities. The most critical ExFIRS subsystem is the Excise Summary Terminal Activity Reporting System, which was designed through a collaborative effort among the IRS, the FHWA, and State and industry stakeholders to detect and prevent the existence of illegal tax evasion schemes by tracking the movement of motor fuel to and from approved terminals. A description of the subsystems is provided in Appendix VI.

In October 2006, the IRS completed transitioning the system development and operations and maintenance of the ExFIRS from the Small Business/Self-Employed Division to the MITS organization's Applications Development ExFIRS Project Office. The use of the ExFIRS



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

applications continues to be controlled by the Excise Tax Program Office within the Small Business/Self-Employed Division.

Over the next 2½ years after the MITS organization became responsible for the ExFIRS project, the aging legacy information systems reached the end of their operational life and had to be replaced with new technology and revised processes. The new technology included upgraded server platforms and operating systems and the movement of legacy applications to a new version of the database. System development efforts focusing on the ExFIRS infrastructure modernization are being implemented using a phased approach, with the redesign of the Excise Fuel Online Network and Excise Tax Agent Center subsystems due in September 2009 and redesign of the Excise Tax Registration Authorization System subsystem due in December 2009. However, some legacy applications are still being maintained.

The costs associated with the subsystems modernization are being paid for with remaining funds available from Fiscal Years 2006 and 2007 appropriations. The current Highway Trust Fund appropriation for the ExFIRS is scheduled to expire in Fiscal Year 2009. Therefore, the IRS will not receive any additional funds from the Highway Trust Fund until additional appropriations are authorized by Congress. While the FHWA expects that the IRS will receive additional Highway Trust Fund monies in Fiscal Year 2010, the appropriations may not be authorized prior to the beginning of the fiscal year. Meanwhile, the IRS is considering its options to pay for ExFIRS operations and maintenance costs until additional Highway Trust Fund monies are available.

This review was performed at the MITS organization's Applications Development offices in New Carrollton, Maryland, and the Small Business/Self-Employed Division's Excise Tax Program offices in Washington, D.C., during the period August 2008 through March 2009. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Detailed information on our audit objectives, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

## *Results of Review*

### ***Progress Has Been Made in Further Developing the Excise Files Information Retrieval System***

In a prior audit report,<sup>3</sup> we made seven recommendations to improve the ExFIRS development project and compliance program. Appendix V provides details on the recommendations related to the ExFIRS development activities and the corrective actions that were taken by the IRS. The status of the compliance program recommendations and corrective actions were reviewed in a separate audit.<sup>4</sup> Office of Management and Budget Circular A-50, *Audit Followup*, emphasizes the importance of followup to monitor the implementation of resolved audit recommendations and ensure that promised corrective actions are actually taken.

The IRS has taken the following actions to improve system development effectiveness and address concerns identified in our prior report:

- Elevating the ExFIRS to a major information technology investment and updating the Exhibit 53.
- Ensuring the ExFIRS Project Office updates appropriate project management documents (e.g., project management plan and work breakdown structure) as required during the development phase and completes a transition management plan for moving the ExFIRS project to operations and maintenance status.
- Ensuring the ExFIRS Project Office includes measurable performance standards in statements of work, clearly defines deliverables, and implements an effective plan for monitoring contractor performance.

The above actions generally address our previous recommendations and have improved the effectiveness and efficiency of the ExFIRS system development. The corrective actions also address the Office of Management and Budget Circular A-123, *Management's Responsibility for Internal Control*, which requires agencies to take timely and effective action to correct management control deficiencies and to complete implementation of agreed corrective actions within 1 year to the extent practicable.

---

<sup>3</sup> *The Excise Files Information Retrieval System Has Not Been Effectively Implemented* (Reference Number 2006-20-001, dated October 18, 2005).

<sup>4</sup> *The Fuel Excise Tax Compliance Program Has Made Significant Progress, but Program Improvements Are Needed to Increase Highway Trust Fund Revenue* (Reference Number 2009-20-051, dated March 30, 2009).



---

## *Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

While the IRS has taken several actions to improve the ExFIRS development, there are a couple of areas (system requirements and collecting and reporting actual costs) that need to be improved to help ensure continued ExFIRS development is efficient and effective at identifying and reducing motor fuel tax evasion.

### ***Changing System Requirements Resulted in Increased Costs and Schedule Delays***

In October 2007, the ExFIRS Project Team began a modernization upgrade of two of the six ExFIRS subsystems using the Tax Exempt and Government Entities Division's Reporting and Examination System (TREES) Compliance Case Management System as the platform. The decision to use the TREES was based on a recommendation from a study conducted from July to September 2007 by the Unisys Corporation, and both MITS organization and Small Business/Self-Employed Division Excise Tax Program personnel agreed with the decision.

However, in February 2008, Small Business/Self-Employed Division Excise Tax Program personnel saw a demonstration of the new Large and Mid-Size Business Division's Issue Management System and recommended that consideration be given to moving the two ExFIRS subsystems to this new platform. In April 2008, the IRS hired the MITRE Corporation to conduct a study to determine whether the new version of the Issue Management System was a better platform than the TREES platform. The MITRE Corporation study concluded that both platforms technically met the user requirements, but stated that Small Business/Self-Employed Division Excise Tax Program personnel were skeptical that the TREES could support their processes. Although the MITRE Corporation study did not provide technical details of why the Issue Management System was the preferred system, it recommended that the IRS implement the ExFIRS modernization of the two subsystems using the new version of the Issue Management System instead of the TREES platform.

In August 2008, IRS executives approved the migration of the two ExFIRS subsystems to the Issue Management System platform. We repeatedly asked Small Business/Self-Employed Division Excise Tax Program management for details on what features or functionality made the new Issue Management System a better solution than the previously approved TREES platform. However, management has not responded to our requests.

The Clinger Cohen Act of 1996<sup>5</sup> states that Federal Government agencies should have a process in place for analyzing, tracking, and evaluating the risks and results of all major capital investments made by an executive agency for information systems. The process shall cover the

---

<sup>5</sup> (Federal Acquisition Reform Act of 1996) (Information Technology Management Reform Act of 1996), Pub. L. No. 104-106, 110 Stat. 642 (codified in scattered sections of 5 U.S.C., 5 U.S.C. app., 10 U.S.C., 15 U.S.C., 16 U.S.C., 18 U.S.C., 22 U.S.C., 28 U.S.C., 29 U.S.C., 31 U.S.C., 38 U.S.C., 40 U.S.C., 41 U.S.C., 42 U.S.C., 44 U.S.C., 49 U.S.C., 50 U.S.C.).



---

## *Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

life of each system and shall include explicit criteria for analyzing the projected and actual costs, benefits, and risks associated with the investments. The process should also ensure that costs and benefits of all the alternatives are compared consistently. Agencies shall provide the means for senior management to obtain timely information regarding the progress of an investment in an information system, including a system of milestones for measuring progress, on an independently verifiable basis, in terms of cost, capability of the system to meet specified requirements, timeliness, and quality.

After reviewing the Unisys Corporation's study, it appears that, while a detailed analysis comparing the TREES capabilities and functionality to the requirements for the ExFIRS modernization was completed, a similar analysis was not performed of the Issue Management System. The Unisys Corporation report stated that there were insufficient information and time available to complete a detailed study of the then current Issue Management System. In addition, the Unisys Corporation study was not extended to allow for an analysis of the new version of the Issue Management System.

The decision to use the TREES Compliance Case Management System rather than take the necessary time to adequately consider the new version of the Issue Management System, and the subsequent decision to move the ExFIRS modernization development to the Issue Management System, resulted in increased costs of almost \$2.8 million and delayed implementation of the first phase of the ExFIRS modernization by 1 year.

### ***Recommendation***

**Recommendation 1:** The Chief Technology Officer should ensure that all future system redesign alternatives are adequately considered before final alternative selection.

**Management's Response:** Management agreed to reemphasize the importance and requirement of completing an alternatives analysis when making an alternative selection for new investments, with the involvement of the architecture and engineering organization.

### ***Processes for Collecting and Reporting System Development Costs Need Improvement***

The actual amounts spent on ExFIRS modernization in Fiscal Years 2006 and 2007 that were reported to the Reporting Compliance Executive Steering Committee did not match the amounts shown in the ExFIRS Budget by Fiscal Year and Release. In addition, the total actual costs reported for Fiscal Years 2006 through 2008 decreased by approximately \$1.77 million as reported on the January 2009 report when compared to the October 2008 report. The Executive Steering Committee meeting minutes did not include an explanation for the decrease in costs. Figure 2 presents the reported ExFIRS modernization actual costs.



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

**Figure 2: Reported ExFIRS Modernization Actual Costs**

<b>Document</b>	<b>Fiscal Year 2006</b>	<b>Fiscal Year 2007</b>	<b>Fiscal Year 2008</b>	<b>Fiscal Years 2006–2008 Total</b>
ExFIRS Budget				
Expenditure Amount Reported as of August 2008	\$0	\$404,000	N/A	
Reporting Compliance Executive Steering Committee Expense Report				
Costs Reported on October 9, 2008	\$156,971	\$4,486,965	\$4,412,125	\$9,056,061
Costs Reported on January 6, 2009	\$387,840	\$4,525,408	\$2,369,626	\$7,282,874
Difference in Reported Actual Costs (January 2009 – October 2008)				(\$1,773,187)

*Source: IRS ExFIRS project documentation and our calculations.*

While preparing for a meeting to discuss the potential discrepant reporting, ExFIRS Project Office personnel discovered errors in the calculations and reporting. After discovering the errors, the January 2009 actual costs were recalculated to ensure accurate reporting in future briefings.

Office of Management and Budget Circular A-123 requires that management controls be established to reasonably ensure that: 1) obligations and costs are in compliance with applicable law; 2) funds, property, and other assets are safeguarded against waste, loss, unauthorized use, or misappropriation; and 3) revenues and expenditures applicable to agency operations are properly recorded and accounted for to permit the preparation of accounts and reliable financial and statistical reports and to maintain accountability over the assets. Information should be communicated to relevant personnel at all levels within an organization. The information should be relevant, reliable, and timely. It is also crucial that an agency communicate with outside organizations as well, whether providing information or receiving it.

Project Office personnel stated that they were not aware of the requirement that disbursements and expenditures are included in the cost amounts. In addition, calculation and input errors were made while preparing the consolidated spreadsheet and related reports because the Project Office did not ensure that the financial information reported, such as actual costs, was completed and accurate.



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

Reporting inaccurate cost information hinders management's ability to make fully informed financial decisions for projects and increases the risk that actual costs will exceed the project budget, potentially putting millions of taxpayer dollars at risk.

***Recommendation***

***Recommendation 2:*** The Chief Technology Officer should ensure that the processes for collecting, computing, verifying, and reporting financial data are clearly understood and followed by Project Office personnel so that the information reported is accurate and can be relied upon when making project decisions.

***Management's Response:*** Management agreed to review procedures and processes in place for collecting, computing, verifying, and reporting financial data and develop mechanisms to ensure accuracy when reporting the data.



## **Appendix I**

### *Detailed Objectives, Scope, and Methodology*

The overall objectives of this review were to determine whether the IRS and its contractors are making improvements to the ExFIRS using sound systems development practices and to follow up on prior ExFIRS findings.<sup>1</sup> To accomplish these objectives, we:

- I. Evaluated the effectiveness of project management controls surrounding the development of the ExFIRS.
  - A. Determined whether key documents (e.g., business case, project management plan,<sup>2</sup> project schedule, and milestone concurrence) were completed and approved prior to/during the development and implementation of the ExFIRS.
  - B. Determined how system development issues, problems, and risks are managed by interviewing the project manager and reviewing project documentation and Executive Steering Committee meeting minutes.
  - C. Determined whether the ExFIRS project was effectively managed to control project costs and schedule and monitor contractor performance.
  - D. Met with the MITS organization's Applications Development organization and ExFIRS Project Office personnel, and the Small Business/Self-Employed Division's Excise Tax Program office personnel to determine the status of system development activities.
  - E. Evaluated the IRS decision to move the ExFIRS from the TREES platform to the Issue Management System platform and determined the costs and other consequences associated with the move.
  - F. Reviewed the Memorandum of Understanding between the IRS and the Department of Transportation to identify the agreed to ExFIRS development and oversight activities and reviewed project documentation to verify required activities are being completed.

---

<sup>1</sup> *The Excise Files Information Retrieval System Has Not Been Effectively Implemented* (Reference Number 2006-20-001, dated October 18, 2005).

<sup>2</sup> See Appendix VII for a glossary of terms.



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

- II. Determined whether corrective actions to address prior recommendations related to ExFIRS development have been effectively implemented.
  - A. Reviewed the associated Joint Audit Management Enterprise System reports to identify the current status of the corrective actions for the following prior recommendations.
    - 1. Recommendation 4: The Chief Information Officer should elevate the ExFIRS to a major information technology investment, update the Exhibit 53, and prepare an Exhibit 300.
    - 2. Recommendation 6: The Commissioner, Small Business/Self-Employed Division, should ensure the ExFIRS Project Office updates appropriate project management documents (i.e., project management plan and work breakdown structure), as required during the development phase; conducts a stress test to ensure sufficient system capacity; completes a transition plan for moving the project to operations and maintenance status; and schedules a postimplementation review.
    - 3. Recommendation 7: The Commissioner, Small Business/Self-Employed Division, in coordination with the Chief Information Officer and the Director, Procurement, should ensure the ExFIRS Project Office includes measurable performance standards in statements of work, clearly defines deliverables, implements an effective plan for monitoring contractor performance, and moves to firm fixed-price contracts.
  - B. Reviewed documentation to verify closed corrective actions have been effectively implemented.



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

**Appendix II**

*Major Contributors to This Report*

Margaret E. Begg, Acting Assistant Inspector General for Audit (Security and Information Technology Services)  
Scott Macfarlane, Director  
Danny Verneuille, Audit Manager  
Mark Carder, Senior Auditor  
Wallace Sims, Senior Auditor  
Tina Wong, Senior Auditor  
Olivia DeBerry, Auditor  
Linda Screws, Auditor



---

*Changing Excise Files Information Retrieval System Development  
Requirements Resulted in Increased Costs and Schedule Delays*

---

## **Appendix III**

### *Report Distribution List*

Commissioner C  
Office of the Commissioner – Attn: Chief of Staff C  
Deputy Commissioner for Operations Support OS  
Deputy Commissioner for Services and Enforcement SE  
Commissioner, Small Business/Self-Employed Division SE:S  
Chief Information Officer OS:CTO  
Deputy Commissioner, Small Business/Self-Employed Division SE:S  
Associate Chief Information Officer, Applications Development OS:CTO:AD  
Director, Specialty Programs, Small Business/Self-Employed Division SE:S:SP  
Director, Stakeholder Management Division OS:CTO:SM  
Chief, Excise Tax Operations, Small Business/Self-Employed Division SE:S:SP:EX  
Director, Compliance, Applications Development OS:CTO:AD:C  
Director, Enforcement, Applications Development OS:CTO:AD:C:E  
Chief Counsel CC  
National Taxpayer Advocate TA  
Director, Office of Legislative Affairs CL:LA  
Director, Office of Program Evaluation and Risk Analysis RAS:O  
Office of Internal Control OS:CFO:CPIC:IC  
Audit Liaisons:  
    Commissioner, Small Business/Self-Employed Division SE:S  
    Director, Program Oversight Office OS:CTO:SM:PO



## Appendix IV

### *Outcome Measures*

This appendix presents detailed information on the measurable impact that our recommended corrective actions will have on tax administration. These benefits will be incorporated into our Semiannual Report to Congress.

#### **Type and Value of Outcome Measure:**

- Inefficient Use of Resources – Actual; \$2,789,133 (see page 5).

#### **Methodology Used to Measure the Reported Benefit:**

In August 2008, IRS executives approved the migration of the two ExFIRS subsystems to the Issue Management System platform. Because development work on the TREES platform had already begun, the decision to change platforms resulted in the inefficient use of resources. Figure 1 provides a breakdown of the funds spent due to the initial study not including a detailed analysis of the Issue Management System and the subsequent decision to change platforms. The decision to change platforms also resulted in a 1-year delay in the ExFIRS modernization implementation.

**Figure 1: Increased Costs Due to Changing Modernization Implementation From the TREES Platform to the Issue Management System Platform**

<b>Expense Type</b>	<b>Amount</b>
TREES Development Work	\$2,405,171
Disengage From the TREES Development Effort	\$160,000
MITRE Corporation Study	<u>\$223,962</u>
<b>Total</b>	<b>\$2,789,133</b>

Source: IRS ExFIRS project documentation.

#### **Type and Value of Outcome Measure:**

- Reliability of Information – Actual; \$1,773,187 (see page 6).

#### **Methodology Used to Measure the Reported Benefit:**

The actual amounts spent on ExFIRS modernization in Fiscal Years 2006 and 2007 that were reported to the Reporting Compliance Executive Steering Committee did not match the amounts



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

shown in the ExFIRS Budget by Fiscal Year and Release. In addition, the total actual costs reported for Fiscal Years 2006 through 2008 decreased by approximately \$1.77 million as reported on the January 2009 report when compared to the October 2008 report. The Executive Steering Committee meeting minutes did not include an explanation for the decrease in costs. While preparing for a meeting to discuss the potential discrepant reporting, ExFIRS Project Office personnel discovered errors in the calculations and reporting. After discovering the errors, the January 2009 actual costs were recalculated to ensure accurate reporting in future briefings. Figure 2 presents the reported ExFIRS modernization actual costs.

**Figure 2: Reported ExFIRS Modernization Actual Costs  
Fiscal Years 2006 Through 2008**

<b>Executive Steering Committee Expense Report</b>	<b>Total</b>
Modernization Costs Reported on October 9, 2008	\$9,056,061
Modernization Costs Reported on January 6, 2009	\$7,282,874
Difference in Reported Modernization Costs	<b>\$1,773,187</b>

Source: IRS ExFIRS project documentation.



## Appendix V

### *Prior Audit Report Recommendations Relating to Systems Development and Associated Corrective Actions Completed*

In our prior audit report,<sup>1</sup> we made seven recommendations (four compliance program and three system development). The IRS identified eight corrective actions in response to the recommendations and reported that the corrective actions had been completed and closed as of September 7, 2006. Three of the eight corrective actions related to the system development recommendations (the numbering used in this appendix reflects the recommendation numbers in our prior audit report). The remaining five corrective actions relate to the ExFIRS compliance program and were reviewed in a separate audit.<sup>2</sup>

We recommended that the Chief Information Officer should:

4. Elevate the ExFIRS to a major information technology investment, update the Exhibit 53,<sup>3</sup> and prepare an Exhibit 300.

Corrective action taken: We determined that the ExFIRS was appropriately reclassified as a major investment in the Fiscal Year 2008 Exhibit 53 submitted to the Department of the Treasury and an Exhibit 300 was prepared. In addition, the ExFIRS project is identified in the Information Technology Project Control Review dated September 2, 2008, as a major project and the ExFIRS (New Development) project is also identified as a major project in the ExFIRS Project Management Plan.

We recommended that the Commissioner, Small Business/Self-Employed Division, should:

6. Ensure the ExFIRS Project Office updates appropriate project management documents (e.g., project management plan and work breakdown structure), as required during the development phase; conducts a stress test to ensure sufficient system capacity; completes a transition plan for moving the project to operations and maintenance status; and schedules a postimplementation review.

---

<sup>1</sup> *The Excise Files Information Retrieval System Has Not Been Effectively Implemented* (Reference Number 2006-20-001, dated October 18, 2005).

<sup>2</sup> *The Fuel Excise Tax Compliance Program Has Made Significant Progress, but Program Improvements Are Needed to Increase Highway Trust Fund Revenue* (Reference Number 2009-20-051, dated March 30, 2009).

<sup>3</sup> See Appendix VII for a glossary of terms.



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

Corrective action taken: We determined that the ExFIRS Project Office is effectively updating and maintaining project management documents as required during the development phase. The IRS transitioned the system development and operations and maintenance of the ExFIRS project from the Small Business/Self-Employed Division to the MITS organization. The ExFIRS Project Office reviewed the project files to identify additional documentation that needed to be prepared, and it prepared the documents.

In the prior report, we recommended that the ExFIRS Project Office schedule a postimplementation review; however, management's response did not specifically comment on that part of the recommendation. The project documents we reviewed indicate a postimplementation review will be done. We also previously recommended that the ExFIRS Project Office ensure stress testing is conducted to ensure sufficient system capacity; however, management did not specifically comment on the recommendation. MITS organization management indicated that the ExFIRS development team has been working to refine the performance requirements for modernization and will allocate them to the infrastructure and the applications, as appropriate. Once this work is completed, the team will determine what testing is appropriate.

7. In coordination with the Chief Information Officer and the Director, Procurement, ensure the ExFIRS Project Office includes measurable performance standards in statements of work, clearly defines deliverables, implements an effective plan for monitoring contractor performance, and moves to firm fixed-price contracts.

Corrective action taken: The IRS is ensuring that statements of work include measurable performance standards and that deliverables are clearly defined. Also, the IRS is incorporating measures for monitoring the effectiveness of contractor performance. Upon transition of the ExFIRS and as operation and maintenance progresses, the MITS organization will enter firm fixed-price contracts when possible while following the guidance issued on April 30, 2004, which established Business Systems Modernization policy on fixed-price contracting.



## **Appendix VI**

### *Subsystems of the Excise Files Information Retrieval System*

The ExFIRS is an umbrella system made up of six subsystems that support the collection of motor fuel industry information, automated analysis of this information, and identification of areas with the highest risk for nonpayment of excise taxes.

1. Excise Summary Terminal Activity Reporting System – A repository of monthly information documents from fuel terminal operators and carriers detailing the receipts and disbursements of liquid products passing through a taxable fuel storage and distribution facility. The information documents can be filed on paper or electronically, with certain filings statutorily required to be made electronically.<sup>1</sup> Return information is provided to the States in accordance with appropriate disclosure laws.
2. Excise Tax Registration Authorization System – A centralized database containing information relating to the Application for Registration (For Certain Excise Tax Activities) (Form 637). It provides centralized data entry (key entry and scanned), monitoring, and reporting of all Form 637 registrants.
3. Excise Fuel Online Network – An integrated case processing and tracking system used by the fuel compliance officers and group managers for the Dyed Diesel Program.
4. Excise Tax Online Exchange – A repository of State records housed by the IRS. The data come from the States but are available to other States and the IRS, under disclosure agreements.
5. Excise Tax Agent Center – A system that automates the processes used to work cases/returns selected for review. A case will move from classification, to the group manager, to the revenue agent who will conduct the review. Revenue agents and managers will work/review cases and save work in progress on the user workstation and on the ExFIRS.
6. Excise Management Information System Data Warehouse and Operational Database – A database that provides a common data management solution, from disparate legacy databases and information stores, created from a variety of sources. It contains information gathered from the various ExFIRS subsystems, as well as IRS sources and United States Customs import information pertaining to taxable commodities.

---

<sup>1</sup> Pub. L. No. 108-357, 118 Stat. 1418 (2004).



## Appendix VII

### *Glossary of Terms*

Dyed Diesel Fuel Program	A program that exempts diesel fuel and kerosene from tax if the fuel is dyed red (usually at a refinery or terminal) under Department of the Treasury regulations and used for prescribed nontaxable off-road purposes, such as in refrigeration units on trailers, off-road diesel-powered equipment, and home heating.
Excise Tax E-File and Compliance System	A system that supports electronic filing of the Quarterly Federal Excise Tax Return (Form 720), Heavy Highway Vehicle Use Tax Return (Form 2290), and Claim for Refund of Excise Taxes (Form 8849).
Exhibit 53	An information technology investment portfolio required by Office of Management and Budget Circular A-11, <i>Preparation, Submission, and Execution of the Budget</i> .
Exhibit 300	A Capital Asset Plan and Business Case required by the Office of Management and Budget.
Firm Fixed-Price Contracts	Contracts in which all parties agree that the contractor assumes the risk for profit and loss and must complete the job satisfactorily at a fixed price.
Highway Trust Fund	A fund established as a mechanism to provide dependable financing for Federal Government highway construction. This fund is a critical source of funding for Department of Transportation programs. It receives its revenue from highway use taxes, including excise taxes on motor fuels and truck-related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use.
Issue Management System	A computer application used during a tax examination of a Large and Mid-Size Business Division taxpayer. It is used to store, track, and manage case information.
Joint Audit Management Enterprise System	The Department of the Treasury's automated audit tracking and management control system.



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

Memorandum of Understanding	A document that expresses mutual accord on an issue between two or more parties. It identifies the contracting parties, spells out the subject matter of the agreement and its objectives, summarizes the essential terms of the agreement, and is signed by the contracting parties.
Project Management Plan	A document that describes the objectives of the project, defines the scope of the project, and describes the approach to managing the project for success.
Refinery	A facility used to produce taxable fuel and from which taxable fuel may be removed by pipeline, by vessel, or at a rack.
Tax Exempt and Government Entities Division's Reporting and Examination System	A computer application used by Tax Exempt and Government Entities Division employees to perform inventory control, compliance testing, tax computing, education and outreach, and team examination monitoring.
Terminal	A storage and distribution facility for taxable fuel that is supplied by pipeline or vessel and from which taxable fuel may be removed at a terminal rack.
Terminal Rack	A mechanism capable of delivering taxable fuel into a means of transport other than a pipeline or vessel.
Transition Management Plan	A document that facilitates the management of activities associated with the smooth transfer of modernized business capabilities, including business processes and systems, from the developer to the receiving organization.
Vessel	A watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on water (e.g., a ship).
Work Breakdown Structure	A project schedule used to manage the tasks, task relationships, and resources needed to meet project goals.



*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

**Appendix VIII**

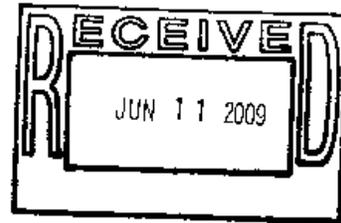
*Management's Response to the Draft Report*



CHIEF TECHNOLOGY OFFICER

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

June 11, 2009



MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM:

Tercence V. Milholland  
Chief Technology Officer

SUBJECT:

Draft Audit Report – Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays (Audit #200820032) (i-trak #2009-58395)

Thank you for the opportunity to review your draft audit report and to meet with the audit team to discuss earlier draft report observations.

I appreciate your comments and observations that acknowledge the Modernization and Information Technology Services organization's actions to improve the Excise Files Information Retrieval System development effectiveness. I also acknowledge and appreciate the audit team's advice on ways to further improve the process. We will continue to emphasize the processes and procedures we have in place to adhere to the Office of Management and Budget Circular A-123 requirement for management controls and continue to collect, compute, verify and report financial data for all system redesign alternatives.

I agree with the two recommendations made as a result of your audit and the attachment to this memo details our actions taken to implement them.

Your continued support and the assistance and guidance your team provides have been a valuable resource to our organization. If you have any questions, please contact me at (202) 622-6800 or Perry Robinett, Director of Program Oversight, at (202) 283-6283.

Attachment



---

*Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays*

---

Attachment

Draft Audit Report – Changing Excise Files Information Retrieval System Development Requirements Resulted in Increased Costs and Schedule Delays (Audit #200820032) (i-trak #2009-58395)

---

**RECOMMENDATION #1:** The Chief Technology Officer should ensure that all future system redesign alternatives are adequately considered before final alternative selection.

**CORRECTIVE ACTION #1:** We agree with this recommendation. Our current practices require completion of an alternatives analysis for new investments, with involvement with architecture and engineering organization. We will re-emphasize the importance of the alternatives analysis when making an alternative selection.

**IMPLEMENTATION DATE:** July 1<sup>st</sup>, 2009

**RESPONSIBLE OFFICIAL:** Associate Chief Information Officer, Applications Development

**CORRECTIVE ACTION MONITORING PLAN:** We enter accepted Corrective Actions into the Joint Audit Management Enterprise System and monitor them on a monthly basis until completion.

**RECOMMENDATION #2:** The Chief Technology Officer should ensure that the processes for collecting, computing, verifying and reporting financial data are clearly understood and followed by Project Office personnel so that the information reported is accurate and can be relied upon when making project decisions.

**CORRECTIVE ACTION #2:** We agree with the recommendation. The Modernization and Information Technology Services organization will review procedures and processes in place for collecting, computing, verifying and reporting of financial data and develop mechanisms to ensure accuracy when reporting the data.

**IMPLEMENTATION DATE:** January 1, 2010

**RESPONSIBLE OFFICIAL:** Associate Chief Information Officer, Applications Development

**CORRECTIVE ACTION MONITORING PLAN:** We enter accepted Corrective Actions into the Joint Audit Management Enterprise System and monitor them on a monthly basis until completion.