



*The Alternatives for Designing and  
Developing the Filing and Payment  
Compliance Project Should Be Revalidated*

**December 2005**

**Reference Number: 2006-20-026**

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.

---

*Phone Number* | 202-927-7037

*Email Address* | [Bonnie.Heald@tigta.treas.gov](mailto:Bonnie.Heald@tigta.treas.gov)

*Web Site* | <http://www.tigta.gov>



TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

December 19, 2005

**MEMORANDUM FOR CHIEF INFORMATION OFFICER**

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

**SUBJECT:** Final Audit Report – The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated (Audit # 200520015)

This report presents the results of our review of the Internal Revenue Service's (IRS) Filing and Payment Compliance (F&PC) project. The overall objective of this review was to determine whether the IRS had adequate justification for the alternative<sup>1</sup> selected for the F&PC project. This audit, together with companion audits being conducted by the Treasury Inspector General for Tax Administration Office of Audit's Small Business and Corporate Programs and Headquarters Operations and Exempt Organizations Programs, is providing coverage of this key IRS initiative.

The IRS does not actively collect billions of dollars in delinquent taxes because it does not have sufficient staff, collection processes, or systems. The IRS initiated the F&PC project to address these shortcomings and increase collections. By implementing the F&PC project, the IRS expects to increase collections by \$15.4 billion over 10 years and reduce the inactive delinquent tax case inventory. In 2004, the President signed the American Jobs Creation Act of 2004<sup>2</sup> giving the IRS authority to enter into contracts with private collection agencies to pursue delinquent taxes. With this new authority, the IRS revised its plans for the F&PC project to include a process for identifying and routing delinquent tax cases to private collection agencies.

---

<sup>1</sup> The IRS conducted studies to identify and evaluate several possible solutions to select the best alternative for designing and developing the project.

<sup>2</sup> Pub. L. No. 108-357, 118 Stat. 1418 (2004).



## *The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

### Synopsis

Twice a year, the Office of Management and Budget requires Federal Government agencies to complete a Capital Asset Plan and Business Case (Exhibit 300) for each major information technology investment. The Alternatives Analysis is a key component of the Exhibit 300. It provides estimated cost and benefit information on viable alternatives to assist management in determining the most effective approach for a project.

Since the passage of the American Jobs Creation Act of 2004, the IRS has made strides to reactivate the F&PC project. The IRS has selected a solution and made progress in implementing the first release. For example, IRS management has approved the first F&PC project subrelease to move into the testing phase. While working toward completing subrelease 1.1, the IRS is also initiating activities for subreleases 1.2 and 1.3. In addition, the IRS identified and evaluated three alternatives to select the best solution for the project. The IRS decided the best solution for the project was to purchase commercially available software.

While the information contained in the draft Exhibit 300 supports the IRS' decision, we could not verify the decision because documentation was not always accurate, complete, and timely. Specifically, spreadsheets detailing cost and benefit calculations for each of the three alternatives contained several errors, and the cost and benefit information used to prepare the draft Exhibit 300 could not be supported. In total, the errors included in the spreadsheets understated the net present value<sup>3</sup> for 1 alternative by \$1.338 billion and overstated the net present value for another alternative by \$8 million. In July 2005, we reported this issue to Business Systems Modernization Office officials, who agreed with our conclusion and revised the spreadsheets. These revisions significantly changed the financial indicators used to identify the best alternative for the F&PC project and they added to the benefits of the chosen alternative. Therefore, the revised financial indicators still support the IRS' decision. Because the revisions were made near the end of our audit work, we did not have the opportunity to review the documentation in detail. However, we did note the IRS had not only made changes based on the errors we identified, but it had also made changes to its methodology for calculating benefits.<sup>4</sup>

In addition, we determined the documentation provided as support for 87 percent of the costs and benefits we reviewed (\$16.1 billion of \$18.5 billion) did not provide enough detail to verify the

---

<sup>3</sup> Net present value is a capital budgeting method that considers all discounted cash flows throughout the life cycle of projects, allowing management to identify projects that have the greatest monetary returns.

<sup>4</sup> In response to a preliminary version of this report, the IRS stated the preparers of the draft Exhibit 300 made a conscious business decision in some instances to not include benefits that may be viewed by outsiders as unrealistic for the chosen alternative. A conservative approach was taken in order to avoid potential overstatement of the benefits. The conservative approach was determined to be preferable to creating a net present value number that may be viewed as unrealistic, or could create questions around the supportability of the number for the long-term.



## *The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

reliability of the information in the draft Exhibit 300. The PRIME contractor<sup>5</sup> originally prepared most of the estimates included in the draft Exhibit 300 in 2001 and 2002. The lack of detailed supporting documentation occurred because the IRS did not obtain the information from the PRIME contractor in 2001 and 2002, the PRIME contractor no longer has the supporting documentation, and the IRS and its current contractors have not updated the original estimates.

### Recommendation

We recommended the Chief Information Officer revalidate the Alternatives Analysis, develop and maintain adequate documentation to support the IRS' decision to purchase commercially available software, and revise the Exhibit 300, if warranted. As part of the revalidation process, we recommended the IRS perform a quality review of all supporting documentation for the Exhibit 300 to ensure the reliability of the documentation.

### Response

The Chief Information Officer agreed with our recommendation. An outside contractor will perform a revalidation of the Alternatives Analysis, and the IRS and a contractor will perform a quality review of supporting documentation of this analysis and the Exhibit 300. In addition, the IRS has established a Vision and Strategy team that will assess its future modernization collection strategy. If the results show a change in direction, the F&PC project team will modify its approach to completing the Alternatives Analysis. Management's complete response to the draft report is included as Appendix VII.

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

---

<sup>5</sup> The PRIME contractor is the Computer Sciences Corporation, which heads an alliance of leading technology companies brought together to assist with the IRS' efforts to modernize its computer systems and related information technology.



---

*The Alternatives for Designing and Developing the Filing and  
Payment Compliance Project Should Be Revalidated*

---

## *Table of Contents*

<b>Background</b> .....	Page 1
<b>Results of Review</b> .....	Page 4
The Internal Revenue Service Has Made Progress in Implementing the First Release of the Filing and Payment Compliance Project.....	Page 4
The Internal Revenue Service Could Not Provide Adequate Documentation to Support Its Decision to Purchase Commercially Available Software.....	Page 5
<u>Recommendation 1:</u> .....	Page 9
<b>Appendices</b>	
Appendix I – Detailed Objective, Scope, and Methodology .....	Page 11
Appendix II – Major Contributors to This Report .....	Page 12
Appendix III – Report Distribution List .....	Page 13
Appendix IV – Outcome Measures.....	Page 14
Appendix V – Enterprise Life Cycle Overview.....	Page 16
Appendix VI – Sample Results.....	Page 21
Appendix VII – Management’s Response to the Draft Report.....	Page 22



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

## *Background*

In December 2004, the Internal Revenue Service (IRS) estimated that taxpayers owed \$278.6 billion in delinquent taxes, only \$83.5 billion of which is considered potentially collectible. However, the IRS does not actively collect billions of dollars in delinquent taxes because it does not have sufficient staff, collection processes, or systems. The IRS initiated the Filing and Payment Compliance (F&PC) project to address these shortcomings and increase collections. By implementing the F&PC project, the IRS expects to increase collections by \$15.4 billion over 10 years and reduce the inactive delinquent tax case inventory.

The F&PC project is a multiyear effort that was initiated in 2001. At that time, the IRS planned to implement commercially available software designed to identify the most appropriate collection method for each collection case and to route the case to the appropriate collection unit within the IRS. The IRS suspended the project due to funding concerns. In anticipation of a law that would provide authority for the IRS to enter into contracts with private collection agencies to pursue delinquent taxes, the IRS began plans for the Collection Contract Support project in 2003. Under this project, the IRS planned to identify and route simple collection cases to private collection agencies for collection. The IRS received that authority in October 2004, when the President signed the American Jobs Creation Act of 2004.<sup>1</sup>

With the passage of the American Jobs Creation Act of 2004, the IRS reactivated the F&PC project and incorporated plans for the Collection Contract Support project. After reactivating the F&PC project, the IRS identified and evaluated three alternatives to select the best solution for the project. The IRS decided the best solution was to purchase commercially available software.

The IRS plans to implement the F&PC project in three releases. The first release, known as the Private Debt Collection release, will include the capabilities originally planned for the Collection Contract Support project to route simple collection cases to private collection agencies. The second release for the F&PC project will implement plans to route collection cases to the appropriate collection units within the IRS Automated Call Sites<sup>2</sup> and campuses.<sup>3</sup> The third

---

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

<sup>2</sup> A telephone contact system through which telephone assistants collect unpaid taxes and secure tax returns from delinquent taxpayers who have not complied with previous notices.

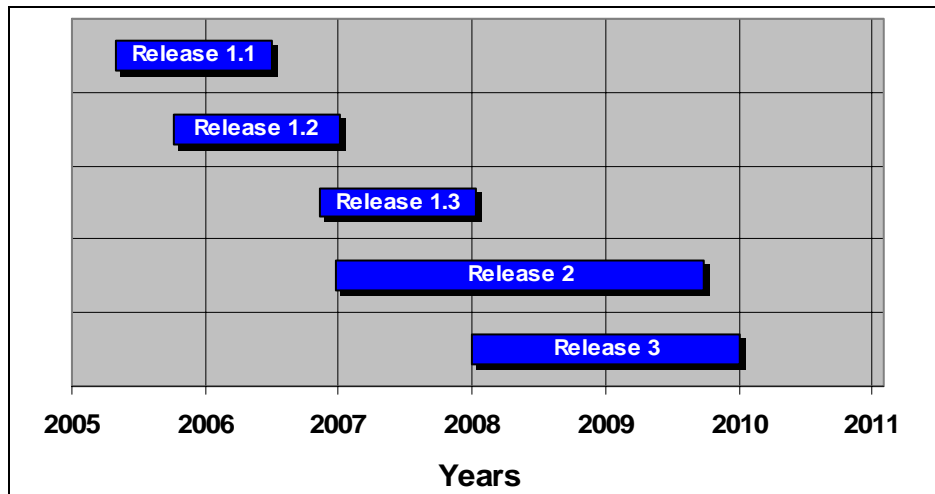
<sup>3</sup> The data processing arm of the IRS. The campuses process paper and electronic submissions, correct errors, and forward data to the Computing Centers for analysis and posting to taxpayer accounts.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

release for the F&PC project will implement plans to route collection cases to the IRS Collection Field function.<sup>4</sup> Figure 1 presents the release schedule for the F&PC project.

**Figure 1: F&PC Project Release Schedule**



Source: IRS presentations.

The IRS has divided the Private Debt Collection release into subreleases. In August 2005, the IRS completed efforts for milestones 3 (Business Systems Design and Baseline Business Case) and 4A (Business Systems Development and Enterprise Deployment Decision) for release 1.1.<sup>5</sup> As part of these milestones, the IRS developed a Capital Asset Plan and Business Case (Office of Management and Budget Exhibit 300) and specific plans documenting how the project will be managed.

Additional audits are being conducted by other Treasury Inspector General for Tax Administration (TIGTA) business units. The first of these reported the Request for Quotation<sup>6</sup> and subsequent amendment did not identify any material omissions adversely affecting the IRS' ability to effectively manage this effort.<sup>7</sup> Our initial audit objective was to review the

<sup>4</sup> A unit consisting of revenue officers who handle personal contacts with taxpayers to collect delinquent accounts or secure unfiled returns.

<sup>5</sup> Business Systems Modernization processes and procedures are documented within the Enterprise Life Cycle. See Appendix V for an overview of the Enterprise Life Cycle.

<sup>6</sup> A Request for Quotation contains detailed information regarding the award fee, performance incentive structure, and nonperformance penalty process.

<sup>7</sup> *The Private Debt Collection Request for Quotation Outlines Adequate Procedures and Controls* (Reference Number 2005-10-156, dated September 2005).



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

Exhibit 300 and specific management plans. However, we reduced the scope of this audit because of delays encountered while the IRS and a previous contractor attempted to locate adequate supporting documentation for the Exhibit 300. As a result, we concentrated solely on determining whether the IRS had adequate supporting documentation for the Exhibit 300.

This audit was conducted while changes were being made at the project level, including a shift in the schedule due to a contract protest. Any changes that have occurred since we concluded our analyses in September 2005 are not reflected in this report. As a result, this report may not reflect the most current status of the F&PC project.

This audit was performed at the Business Systems Modernization Office and PRIME contractor<sup>8</sup> facilities in New Carrollton, Maryland, during the period March through September 2005. The audit was conducted in accordance with *Government Auditing Standards*. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.

---

<sup>8</sup> The PRIME contractor is the Computer Sciences Corporation, which heads an alliance of leading technology companies brought together to assist with the IRS' efforts to modernize its computer systems and related information technology.





---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

## *Results of Review*

### ***The Internal Revenue Service Has Made Progress in Implementing the First Release of the Filing and Payment Compliance Project***

Since the passage of the American Jobs Creation Act of 2004, the IRS has made strides to reactivate the F&PC project. For example, IRS management has approved the first F&PC project subrelease to move into the testing phase. In addition, the IRS prepared a cost estimate for future subreleases and selected an alternative for designing and developing the F&PC project.

#### ***The IRS has made progress in implementing the first release of the F&PC project***

The IRS has unconditionally approved the system and physical design<sup>9</sup> of subrelease 1.1 of the F&PC project and authorized the project team to test the system and prepare for deployment. This is significant because we have previously expressed concern the IRS was conditionally approving projects to move forward even though documentation had not been completed and approved.<sup>10</sup> The project team is currently testing subrelease 1.1 for deployment in January 2006, with the first delinquent tax cases being forwarded to private collection agencies in the summer of 2006.

While working toward completing subrelease 1.1, the IRS is also initiating activities for subreleases 1.2 and 1.3. For example, the IRS has prepared an Independent Government Cost Estimate (IGCE) for subreleases 1.2 and 1.3. The purpose of an IGCE is to provide an independent and realistic cost estimate that can be compared with the contractor's proposed cost. We found the IGCE to be logically prepared, including reasonable time periods and required skill sets. This is significant because we previously reported IRS officials did not routinely prepare IGCEs.<sup>11</sup> Additionally, the IRS has selected a contractor for subreleases 1.2 and 1.3.

---

<sup>9</sup> See Appendix V for an overview of the Enterprise Life Cycle.

<sup>10</sup> *Enhancements to the Internet Refund Project Need to Be Completed to Ensure Planned Benefits to Taxpayers Are Realized* (Reference Number 2003-20-053, dated February 2003).

<sup>11</sup> *While Many Improvements Have Been Made, Continued Focus Is Needed to Improve Contract Negotiations and Fully Realize the Potential of Performance-Based Contracting* (Reference Number 2005-20-083, dated May 2005).



---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

**The IRS has identified what it considers to be the best alternative for the F&PC project**

Twice a year, the Office of Management and Budget (OMB) requires Federal Government agencies to complete an Exhibit 300 for each major information technology investment. The OMB uses the Exhibit 300 to allocate funds for information technology investments. In addition, agencies use the Exhibit 300 to request funds, monitor the progress of projects, and improve management decision making related to information technology investments. The Alternatives Analysis is a key component of the Exhibit 300. It provides estimated cost and benefit information on viable alternatives to assist management in determining the most effective approach for a project. The F&PC project's draft Exhibit 300 dated June 2005 documents the following alternatives as the most viable solutions for the project:

- Alternative 1: Implement commercially available software to improve collection processes, and contract with private collection agencies to pursue delinquent taxes.
- Alternative 2: Modify the current processing environment.
- Alternative 3: Obtain an additional 1,600 Full-Time Equivalents (FTE)<sup>12</sup> to work collection cases.

The IRS used previous Collection Contract Support and F&PC project information, as well as a recent study, to compile the estimated costs, benefits, and financial indicators for each alternative and to identify the best solution for the F&PC project. It documented the analysis in the draft Exhibit 300 for the project. While the narrative and summary data contained in the draft Exhibit 300 support the IRS' decision, the IRS could not provide detailed support for most of the cost and benefit information in the Alternatives Analysis section of the draft Exhibit 300.

***The Internal Revenue Service Could Not Provide Adequate Documentation to Support Its Decision to Purchase Commercially Available Software***

The Exhibit 300 is used by Federal Government agencies to request funds, monitor the progress of projects, and improve management decision making related to information technology investments. Because the Exhibit 300 is used to guide decision making, the IRS should obtain and maintain reliable and timely information to support the Exhibit 300. As part of the draft Exhibit 300, the Alternatives Analysis for the F&PC project provides estimated cost and benefit

---

<sup>12</sup> An FTE is a measure of labor hours in which 1 FTE is equal to 8 hours multiplied by the number of compensable days in a particular fiscal year. For Fiscal Year 2005, 1 FTE was equal to 2,088 staff hours.



---

## *The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

information on three viable alternatives selected by the IRS. The IRS used these estimated costs and benefits for each alternative to develop financial indicators, such as net present value<sup>13</sup> and return on investment.<sup>14</sup> The IRS then identified the best alternative for the F&PC project from these indicators. Based on the estimated costs, benefits, and financial indicators included in the draft Exhibit 300, the IRS decided purchasing commercially available software (Alternative 1) was the best solution for designing and developing the F&PC project.

We could not verify the IRS' decision because documentation was not always accurate, complete, and timely. Specifically, spreadsheets detailing cost and benefit calculations for each of the three alternatives contained several errors, the results of a recent study were incomplete, and the cost and benefit information used to prepare the draft Exhibit 300 was outdated and could not be supported.

### **Spreadsheets used to prepare the draft Exhibit 300 contained several errors**

The IRS and its contractors created spreadsheets to calculate total estimated costs and benefits for all three alternatives included in the draft Exhibit 300, as well as cash flow,<sup>15</sup> net present value, discounted payback period,<sup>16</sup> internal rate of return,<sup>17</sup> and return on investment for each alternative. However, we identified several errors in the spreadsheets used to prepare the draft Exhibit 300. In total, the errors included in the spreadsheets understated the net present value for 1 alternative by \$1.338 billion and overstated the net present value for another alternative by \$8 million. Figure 2 shows the errors identified for Alternatives 1 and 2 for the F&PC project.

---

<sup>13</sup> Net present value is a capital budgeting method that considers all discounted cash flows throughout the life cycle of projects, allowing management to identify projects that have the greatest monetary returns.

<sup>14</sup> Return on investment is a measure that indicates the number of dollars saved from each dollar spent.

<sup>15</sup> Cash flow is the inflow (benefits) and outflow (costs) of funds.

<sup>16</sup> Discounted payback period is the length of time required for discounted cash flows to equal the initial investment (cost).

<sup>17</sup> Internal rate of return is the interest rate that makes net present value of all cash flow (benefits minus costs) equal zero.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

**Figure 2: Errors Identified for Alternatives 1 and 2 for the F&PC Project**

<b>Financial Indicator</b>	<b>Draft Exhibit 300 Dated June 2005</b>	<b>TIGTA Calculation</b>	<b>Difference</b>
<b>Alternative 1</b>			
Net Present Value	\$ 100 million	\$ 1.438 billion	\$ 1.338 billion
Internal Rate of Return	20%	420%	400%
Discounted Payback Period	8 years	3 years	5 years
<b>Alternative 2</b>			
Net Present Value	\$ -89 million	\$ -97 million	\$ -8 million

*Source: Draft Exhibit 300 for the F&PC project and our analysis of IRS spreadsheets used to calculate financial indicators.*

**Management Action:** In July 2005, we reported this issue to Business Systems Modernization Office officials, who agreed with our conclusion and revised the spreadsheets. These revisions significantly changed the financial indicators used to identify the best alternative for the F&PC project, and they added to the benefits of the chosen alternative. Therefore, the revised financial indicators still support the IRS’ decision that Alternative 1 is the best solution for the F&PC project. Because the revisions were made near the end of our audit work, we did not have the opportunity to review the documentation in detail. However, we did note the IRS had not only made changes based on the errors we identified, but it had also made changes to its methodology for calculating benefits.<sup>18</sup> Therefore, the figures we present as miscalculations in Figure 2 reflect only the errors we identified in the June 2005 draft Exhibit 300. Since the IRS revised the spreadsheets during our audit, we are making no additional recommendations in this area.

<sup>18</sup> In response to a preliminary version of this report, the IRS stated the preparers of the draft Exhibit 300 made a conscious business decision in some instances to not include benefits that may be viewed by outsiders as unrealistic for the chosen alternative. A conservative approach was taken in order to avoid potential overstatement of the benefits. The conservative approach was determined to be preferable to creating a net present value number that may be viewed as unrealistic, or could create questions around the supportability of the number for the long-term.



---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

**The results of a recent study were incomplete**

From December 2004 through February 2005, the IRS and its contractors conducted a study designed to revalidate the decision the IRS had made during previous projects to purchase commercially available software for the F&PC project. As part of the study, the IRS considered whether to purchase commercially available software (buy solution) or to modify the current IRS processing systems (build solution). The IRS planned to base the revalidation on estimated costs and benefits reported from previous projects and current information provided by the Information Technology Services (ITS) organization and the software vendors.

However, the ITS organization did not provide all the information needed to complete the study. Specifically, the ITS organization did not provide development costs for the build solution or an assessment of the number of F&PC project business requirements that could be met in the current processing environment. Without complete information related to the build solution, the IRS cannot adequately compare the two alternatives to identify the best solution for the project.

**The IRS could not provide adequate documentation to support most of the estimated costs and benefits included in the draft Exhibit 300**

To determine if the IRS had support for the estimates included in the draft Exhibit 300 for the F&PC project, we reviewed the supporting documentation for 93 percent of the costs and benefits for Alternatives 1 and 2 in the draft Exhibit 300. We did not review the estimated cost and benefit documentation for Alternative 3 because it was not included in the President's budget and it was the least cost beneficial of the three alternatives.

We have previously reported the IRS was not always able to provide adequate documentation to support project decisions.<sup>19</sup> Based on our previous findings, we recommended the Chief Information Officer hold project managers accountable to ensure all sections of the Exhibit 300 are consistent, accurate, complete, and supported by documentation.

While the IRS responded it would make project managers accountable for all data contained in their Exhibit 300s, we determined the documentation provided as support for 87 percent of the costs and benefits we reviewed (\$16.1 billion of \$18.5 billion) did not provide enough detail to verify the reliability of the information in the draft Exhibit 300. Figure 3 shows the amounts of documentation considered as adequate and inadequate support.<sup>20</sup>

---

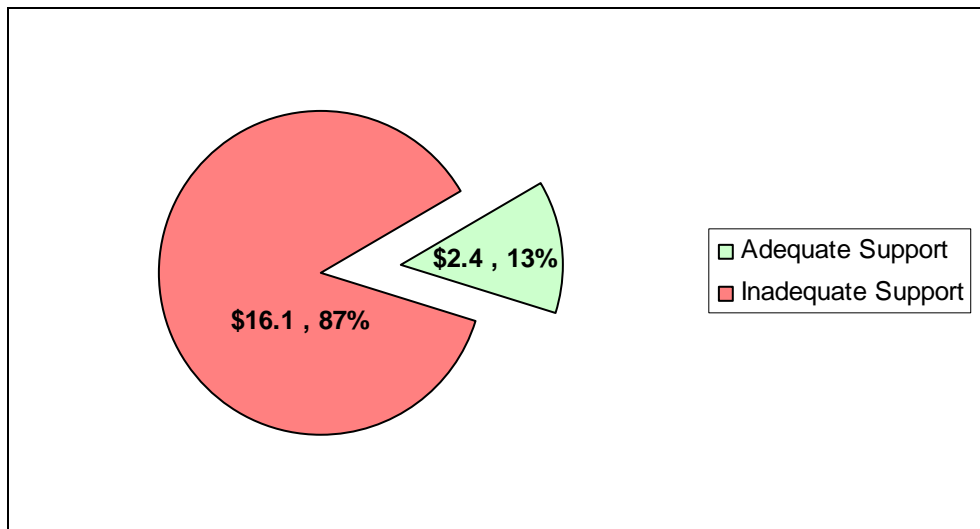
<sup>19</sup> *The Department of the Treasury's HR Connect Human Resources System Was Not Effectively Implemented* (Reference Number 2005-10-037, dated February 2005) and *Business Cases for Information Technology Projects Need Improvement* (Reference Number 2005-20-074, dated April 2005).

<sup>20</sup> See Appendix VI for more information related to the sample selection and the sample results.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

**Figure 3: Reliability of Supporting Documentation (in Billions)**



Source: Our analysis of supporting documentation for the draft F&PC project Exhibit 300.

The lack of detailed supporting documentation occurred because the IRS did not obtain the information from the PRIME contractor in 2001 and 2002 when the PRIME contractor originally prepared most of the cost and benefit estimates included in the draft Exhibit 300. In addition, the PRIME contractor no longer has the supporting documentation, and the IRS and its current contractors have not updated the original 2001 and 2002 estimates.

If the Exhibit 300 does not contain reliable and timely information, Federal Government officials and the IRS may be unable to rely on the Exhibit 300 to make appropriate business decisions for F&PC project planning, budgeting, acquisition, and management activities. Further, the IRS may have decided to move forward with commercially available software for the F&PC project based on unreliable information.

### **Recommendation**

**Recommendation 1:** The Chief Information Officer should revalidate the Alternatives Analysis, develop and maintain adequate documentation to support the IRS' decision to purchase commercially available software, and revise the Exhibit 300, if warranted. As part of the revalidation process, the IRS should perform a quality review of all supporting documentation for the Exhibit 300 to ensure the reliability of the documentation.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

**Management's Response:** The Chief Information Officer agreed with our recommendation. An outside contractor will perform a revalidation of the Alternatives Analysis, and the IRS and a contractor will perform a quality review of supporting documentation of this analysis and the Exhibit 300. In addition, the IRS has established a Vision and Strategy team that will assess its future modernization collection strategy. If the results show a change in direction, the F&PC project team will modify its approach to completing the Alternatives Analysis.



---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

## Appendix I

### *Detailed Objective, Scope, and Methodology*

The overall objective of this review was to determine whether the Internal Revenue Service (IRS) had adequate justification for the alternative<sup>1</sup> selected for the Filing and Payment Compliance (F&PC) project. To accomplish this objective, we:

- I. Determined whether the project team had an adequate Alternatives Analysis included in the Office of Management and Budget Capital Asset Plan and Business Case (Exhibit 300).
- II. Determined whether the IRS had adequate support for the estimated costs and benefits of the project listed in the Exhibit 300. We accomplished this subobjective by reviewing the supporting documentation for 93 percent of the costs and benefits for Alternatives 1 and 2 in the draft Exhibit 300. This sample was selected judgmentally by choosing the estimated costs and benefits with the highest dollar amounts. We did not review the estimated cost and benefit documentation for Alternative 3 because it was not included in the President's budget and it was the least cost beneficial of the three alternatives. The total population of estimated costs and benefits included in the Exhibit 300 was \$20.9 billion. We used a judgmental sample because we did not plan to project the results.<sup>2</sup>
- III. Determined whether the IRS and its contractors provided all end deliverables for a recent study.<sup>3</sup>
- IV. Determined whether the IRS obtained an Independent Government Cost Estimate for the task related to subreleases 1.2 and 1.3.

Our initial audit plan included audit steps designed to determine whether F&PC project officials followed critical processes established to ensure the project's success (e.g., configuration and risk management, requirements development, and performance tracking). However, we reduced the scope of this audit due to delays encountered while the IRS and a previous contractor attempted to locate adequate supporting documentation for the Exhibit 300. As a result, we concentrated solely on determining whether the IRS had adequate justification for the alternative selected for the F&PC project.

---

<sup>1</sup> The IRS conducted studies to identify and evaluate several possible solutions to select the best alternative for designing and developing the project.

<sup>2</sup> See Appendix VI for more information related to the sample selection and the sample results.

<sup>3</sup> The purpose of the recent study, conducted by IRS and contractor personnel, was to assess and analyze the overall F&PC project release schedule, update the Exhibit 300, and provide analysis on the "build" vs. "buy" approach.





*The Alternatives for Designing and Developing the Filing and  
Payment Compliance Project Should Be Revalidated*

---

**Appendix II**

*Major Contributors to This Report*

Margaret E. Begg, Assistant Inspector General for Audit (Information Systems Programs)  
Gary V. Hinkle, Director  
Troy D. Paterson, Audit Manager  
James A. Douglas, Lead Auditor  
Mark K. Carder, Senior Auditor  
Suzanne M. Noland, Auditor



*The Alternatives for Designing and Developing the Filing and  
Payment Compliance Project Should Be Revalidated*

---

**Appendix III**

*Report Distribution List*

Commissioner C  
Office of the Commissioner – Attn: Chief of Staff C  
Deputy Commissioner for Operations Support OS  
Associate Chief Information Officer, Business Systems Modernization OS:CIO:B  
Associate Chief Information Officer, Information Technology Services OS:CIO:I  
Director, Stakeholder Management OS:CIO:SM  
Deputy Associate Chief Information Officer, Program Management OS:CIO:B:PM  
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 Management Controls OS:CFO:AR:M  
Audit Liaisons:  
    Associate Chief Information Officer, Business Systems Modernization OS:CIO:B  
    Manager, Program Oversight Office OS:CIO:SM:PO



---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

## Appendix IV

### *Outcome Measures*

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

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

- Reliability of Information – Potential; \$1.346 billion (see page 5).

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

Twice a year, the Office of Management and Budget requires Federal Government agencies to complete a Capital Asset Plan and Business Case (Exhibit 300) for each major information technology investment. The Alternatives Analysis is a key component of the Exhibit 300. It provides estimated cost and benefit information on viable alternatives to assist management in determining the most effective approach for a project. The Internal Revenue Service (IRS) identified and evaluated three alternatives to select the best solution for the Filing and Payment Compliance (F&PC) project. The IRS decided the best solution for the project was to purchase commercially available software.

While the information contained in the draft Exhibit 300 supports the IRS' decision, we could not verify the decision because documentation was not always accurate, complete, and timely. Specifically, spreadsheets detailing cost and benefit calculations for each of the three alternatives contained several errors. In total, the errors included in the spreadsheets understated the net present value<sup>1</sup> for 1 alternative by \$1.338 billion and overstated the net present value for another alternative by \$8 million. In July 2005, we reported this issue to Business Systems Modernization Office officials, who agreed with our conclusion and revised the spreadsheets.

These revisions significantly changed the financial indicators used to identify the best alternative for the F&PC project and they added to the benefits of the chosen alternative. Therefore, the revised financial indicators still support the IRS' decision that Alternative 1 is the best solution for the F&PC project. Because the revisions were made near the end of our audit work, we did

---

<sup>1</sup> Net present value is a capital budgeting method that considers all discounted cash flows throughout the life cycle of projects, allowing management to identify projects that have the greatest monetary returns.



---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

not have the opportunity to review the documentation in detail. However, we did note the IRS had not only made changes based on the errors we identified, but it had also made changes to its methodology for calculating benefits.<sup>2</sup> Therefore, the figures we present as miscalculations reflect only the errors we identified in the June 2005 draft Exhibit 300.

**Type and Value of Outcome Measure:**

- Reliability of Information – Potential; \$16.1 billion (see page 5).

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

To determine if the IRS had support for the estimates included in the draft Exhibit 300 for the F&PC project, we reviewed the supporting documentation for 93 percent of the costs and benefits for Alternatives 1 and 2 in the draft Exhibit 300. We did not review the estimated cost and benefit documentation for Alternative 3 because it was not included in the President's budget and it was the least cost beneficial of the three alternatives. We determined the documentation provided as support for 87 percent of the costs and benefits we reviewed (\$16.1 billion of \$18.5 billion) did not provide enough detail to verify the reliability of the information in the draft Exhibit 300. The lack of detailed supporting documentation occurred because the IRS did not obtain the information from the PRIME contractor<sup>3</sup> in 2001 and 2002 when the PRIME contractor originally prepared most of the cost and benefit estimates included in the draft Exhibit 300. In addition, the PRIME contractor no longer has the supporting documentation, and the IRS and its current contractors have not updated the original 2001 and 2002 estimates.<sup>4</sup>

---

<sup>2</sup> In response to a preliminary version of this report, the IRS stated the preparers of the draft Exhibit 300 made a conscious business decision in some instances to not include benefits that may be viewed by outsiders as unrealistic for the chosen alternative. A conservative approach was taken in order to avoid potential overstatement of the benefits. The conservative approach was determined to be preferable to creating a net present value number that may be viewed as unrealistic, or could create questions around the supportability of the number for the long term.

<sup>3</sup> The PRIME contractor is the Computer Sciences Corporation, which heads an alliance of leading technology companies brought together to assist with the IRS' efforts to modernize its computer systems and related information technology.

<sup>4</sup> See Appendix VI for more information related to the sample selection and the sample results.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

## Appendix V

### *Enterprise Life Cycle Overview*

The Enterprise Life Cycle (ELC) defines the processes, products, techniques, roles, responsibilities, policies, procedures, and standards associated with planning, executing, and managing business change. It includes redesign of business processes; transformation of the organization; and development, integration, deployment, and maintenance of the related information technology applications and infrastructure. Its immediate focus is the Internal Revenue Service (IRS) Business Systems Modernization (BSM) program. Both the IRS and the PRIME contractor<sup>1</sup> must follow the ELC in developing/acquiring business solutions for modernization projects.

The ELC framework is a flexible and adaptable structure within which one plans, executes, and integrates business change. The ELC process layer was created principally from the Computer Sciences Corporation's Catalyst<sup>®</sup> methodology.<sup>2</sup> It is intended to improve the acquisition, use, and management of information technology within the IRS; facilitate management of large-scale business change; and enhance the methods of decision making and information sharing. Other components and extensions were added as needed to meet the specific needs of the IRS BSM program.

### **ELC Processes**

A process is an ordered, interdependent set of activities established to accomplish a specific purpose. Processes help to define what work needs to be performed. The ELC methodology includes two major groups of processes:

- **Life-Cycle Processes**, which are organized into phases and subphases and which address all domains of business change.
- **Management Processes**, which are organized into management areas and which operate across the entire life cycle.

---

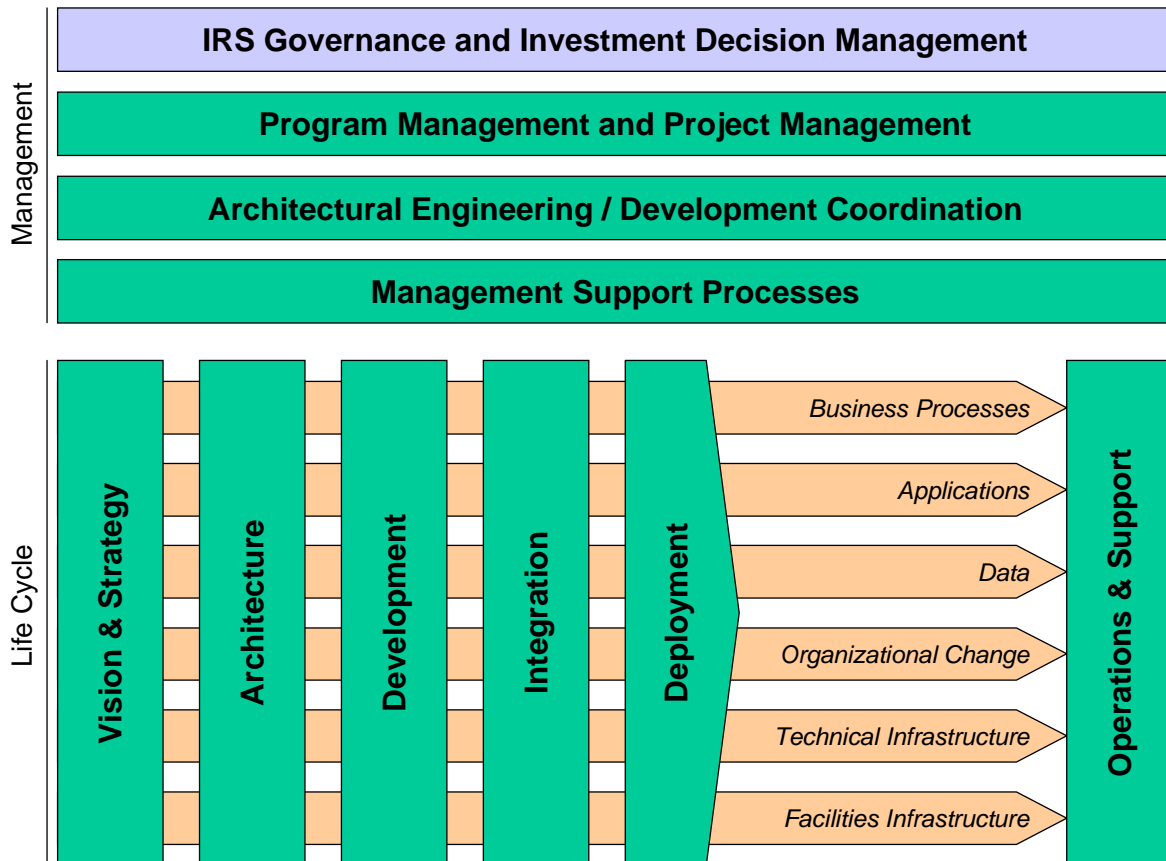
<sup>1</sup> The PRIME contractor is the Computer Sciences Corporation, which heads an alliance of leading technology companies brought together to assist with the IRS' efforts to modernize its computer systems and related information technology.

<sup>2</sup> The IRS has acquired a perpetual license to Catalyst<sup>®</sup> as part of the PRIME contract, subject to certain restrictions. The license includes rights to all enhancements made to Catalyst<sup>®</sup> by the Computer Sciences Corporation during the contract period.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

**Enterprise Life-Cycle Processes**



Source: ELC Guide, Page 2-16.

**Life-Cycle Processes**

The life-cycle processes of the ELC are divided into six phases, as described below:

- **Vision and Strategy** - This phase establishes the overall direction and priorities for business change for the enterprise. It also identifies and prioritizes the business or system areas for further analysis.



---

## *The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

- **Architecture** - This phase establishes the concept/vision, requirements, and design for a particular business area or target system. It also defines the releases for the business area or system.
- **Development** - This phase includes the analysis, design, acquisition, modification, construction, and testing of the components of a business solution. This phase also includes routine planned maintenance of applications.
- **Integration** - This phase includes the integration, testing, piloting, and acceptance of a release. In this phase, the integration team brings together individual work packages of solution components developed or acquired separately during the Development phase. Application and technical infrastructure components are tested to determine whether they interact properly. If appropriate, the team conducts a pilot to ensure all elements of the business solution work together.
- **Deployment** - This phase includes preparation of a release for deployment and actual deployment of the release to the deployment sites. During this phase, the deployment team puts the solution release into operation at target sites.
- **Operations and Support** - This phase addresses the ongoing operations and support of the system. It begins after the business processes and system(s) have been installed and have begun performing business functions. It encompasses all of the operations and support processes necessary to deliver the services associated with managing all or part of a computing environment.

The Operations and Support phase includes the scheduled activities, such as planned maintenance, systems backup, and production output, as well as the nonscheduled activities, such as problem resolution and service request delivery, including emergency unplanned maintenance of applications. It also includes the support processes required to keep the system up and running at the contractually specified level.

### ***Management Processes***

Besides the life-cycle processes, the ELC also addresses the various management areas at the process level. The management areas include:

- **IRS Governance and Investment Decision Management** - This area is responsible for managing the overall direction of the IRS, determining where to invest, and managing the investments over time.
- **Program Management and Project Management** - This area is responsible for organizing, planning, directing, and controlling the activities within the program and its



---

## *The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

subordinate projects to achieve the objectives of the program and deliver the expected business results.

- **Architectural Engineering/Development Coordination** - This area is responsible for managing the technical aspects of coordination across projects and disciplines, such as managing interfaces, controlling architectural changes, ensuring architectural compliance, maintaining standards, and resolving issues.
- **Management Support Processes** - This area includes common management processes, such as quality management and configuration management that operate across multiple levels of management.

### **Milestones**

The ELC establishes a set of repeatable processes and a system of milestones, checkpoints, and reviews that reduce the risks of systems development, accelerate the delivery of business solutions, and ensure alignment with the overall business strategy. The ELC defines a series of milestones in the life-cycle processes. Milestones provide for “go/no-go” decision points in the project and are sometimes associated with funding approval to proceed. They occur at natural breaks in the process where there is new information regarding costs, benefits, and risks and where executive authority is necessary for next phase expenditures.

There are five milestones during the project life cycle:

- **Milestone 1 - Business Vision and Case for Action.** In the activities leading up to Milestone 1, executive leadership identifies the direction and priorities for IRS business change. These guide which business areas and systems development projects are funded for further analysis. The primary decision at Milestone 1 is to select BSM projects based on both the enterprise-level Vision and Strategy and the Enterprise Architecture.
- **Milestone 2 - Business Systems Concept and Preliminary Business Case.** The activities leading up to Milestone 2 establish the project concept, including requirements and design elements, as a solution for a specific business area or business system. A preliminary business case is also produced. The primary decision at Milestone 2 is to approve the solution/system concept and associated plans for a modernization initiative and to authorize funding for that solution.





*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

- **Milestone 3 - Business Systems Design and Baseline Business Case.** In the activities leading up to Milestone 3, the major components of the business solution are analyzed and designed. A baseline business case is also produced. The primary decision at Milestone 3 is to accept the logical system design and associated plans and to authorize funding for development, test, and (if chosen) pilot of that solution.
- **Milestone 4 - Business Systems Development and Enterprise Deployment Decision.** In the activities leading up to Milestone 4, the business solution is built. The Milestone 4 activities are separated by two checkpoints. Activities leading up to Milestone 4A involve further requirements definition, production of the system's physical design, and determination of the applicability of fixed-price contracting to complete system development and deployment. To achieve Milestone 4B, the system is integrated with other business systems and tested, piloted (usually), and prepared for deployment. The primary decision at Milestone 4B is to authorize the release for enterprise-wide deployment and commit the necessary resources.
- **Milestone 5 - Business Systems Deployment and Postdeployment Evaluation.** In the activities leading up to Milestone 5, the business solution is fully deployed, including delivery of training on use and maintenance. The primary decision at Milestone 5 is to authorize the release of performance-based compensation based on actual, measured performance of the business system.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

**Appendix VI**

*Sample Results*

The draft Office of Management and Budget Capital Asset Plan and Business Case (Exhibit 300) included estimated costs and benefits of \$20.9 billion, from which the Treasury Inspector General for Tax Administration (TIGTA) selected and reviewed a judgmental sample of \$18.5 billion. Table 1 presents the results from our review. We concluded the documentation provided as support for 87 percent of the sample population (\$16.1 billion of \$18.5 billion) was inadequate because the documentation did not provide enough detail to verify the reliability of the information in the draft Exhibit 300.

**Table 1: Sample Results**

Sample Item (Cost/Benefit)	Amount (in millions)	TIGTA Conclusion (in millions)	
		Adequate Support Provided	Inadequate Support Provided
<b>Alternative 1</b>			
Program Staff (Acquisition Cost)	\$69		\$69
Contract Services (Acquisition Cost)	\$131		\$131
Other (Acquisition Cost)	\$16		\$16
Hardware (Maintenance Cost)	\$27		\$27
Increased Collection Dollars	\$15,400	\$2,400	\$13,000
Cost Avoidance	\$2,365		\$2,365
<b>Alternative 2</b>			
Program Staff (Acquisition Cost)	\$52		\$52
Contract Services (Acquisition Cost)	\$31		\$31
Equipment (Maintenance Cost)	\$171		\$171
Cost Avoidance	\$246		\$246
<b>Totals:</b>	<b>\$18,508</b>	<b>\$2,400</b>	<b>\$16,108</b>
<b>Percentages:</b>		13.0%	87.0%

Source: TIGTA analysis of Exhibit 300 supporting documentation provided by Internal Revenue Service officials.



*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

**Appendix VII**

*Management's Response to the Draft Report*



CHIEF INFORMATION OFFICER

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

RECEIVED  
DEC - 2 2005

December 2, 2005

MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: W. Todd Grams *WTG*  
Chief Information Officer

SUBJECT: Draft Audit Report – The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated (Audit # 200520015) – (I-trak # 2006-05605)

We appreciate the opportunity to review your audit report recommending the revalidation of the Alternatives Analysis to support the decision to purchase commercially available software as the solution for the Filing and Payment Compliance (F&PC) project. We understand the difficulties encountered during this audit due to the elapsed time from the project's initiation in 2001, suspension in early 2003, and subsequent reactivation in 2004.

Thank you for acknowledging the progress we have made in the reactivation of the F&PC project. We also acknowledge and appreciate your advice on ways to further improve the cost and schedule estimation processes. We agree with your recommendation and we have included our corrective action for this recommendation in the attachment.

We appreciate your continued support and the valuable assistance and guidance that your team provides. If you have any questions, please contact me at (202) 622-6800, or have a member of your staff contact Judy Mills, Director of Program Oversight, at (202) 283-4915.

Attachment



---

*The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated*

---

Attachment

Draft Audit Report – The Alternatives for Designing and Developing the Filing and Payment Compliance Project Should Be Revalidated (Audit # 200520015)

---

**THE INTERNAL REVENUE SERVICE COULD NOT PROVIDE ADEQUATE DOCUMENTATION TO SUPPORT ITS DECISION TO PURCHASE COMMERCIALY AVAILABLE SOFTWARE:**

**RECOMMENDATION #1:** The Chief Information Officer should revalidate the Alternatives Analysis, develop and maintain adequate documentation to support the IRS' decision to purchase commercially available software, and revise the Exhibit 300, if warranted. As part of the revalidation process, the IRS should perform a quality review of all supporting documentation for the Exhibit 300 to ensure the reliability of the documentation.

**CORRECTIVE ACTION #1:** A revalidation of the Alternative Analysis that confirmed the decision to purchase commercially available software will be performed by an outside contractor. The contractor will be re-costing Alternatives 1 (buy) and 2 (build) using the "TruePlanning" structure and data model. Additionally, the Filing and Payment Compliance (F&PC) Advisory Council, the Taxpayer Relationship Management Executive Steering Committee, and MITRE will conduct a quality review of all supporting documentation for this revalidation process as well as the supporting documentation for the Exhibit 300.

In addition, a Vision & Strategy team is currently assessing our future modernization collection strategy. Should the outcome of this initiative suggest a change in direction, the F&PC team will modify its approach to completing this Alternative Analysis and adjust the outside contractor's services to support the findings of this V&S team.

**IMPLEMENTATION DATE:** August 1, 2006

**RESPONSIBLE OFFICIAL:** Director Tax Administration

**CORRECTIVE ACTION MONITORING PLAN:** A Tax Administration Modernization (TAM) senior manager will be the point of contact and will report progress at the biweekly TAM Management meeting.