# TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



Information Technology Investment
Management Controls Should Be Better
Aligned With the Federal Information
Technology Acquisition Reform Act of 2014

July 27, 2018

Reference Number: 2018-20-045

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 / 202-622-6500

E-mail Address / <u>TIGTACommunications@tigta.treas.gov</u>

Website / <a href="http://www.treasury.gov/tigta">http://www.treasury.gov/tigta</a>



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### **HIGHLIGHTS**

INFORMATION TECHNOLOGY
INVESTMENT MANAGEMENT
CONTROLS SHOULD BE BETTER
ALIGNED WITH THE FEDERAL
INFORMATION TECHNOLOGY
ACQUISITION REFORM ACT OF 2014

# **Highlights**

Final Report issued on July 27, 2018

Highlights of Reference Number: 2018-20-045 to the Commissioner of Internal Revenue.

#### **IMPACT ON TAXPAYERS**

In December 2014, Congress enacted the Federal Information Technology Acquisition Reform Act of 2014 (FITARA) to improve major Federal agencies' information technology acquisitions as well as hold Chief Information Officers (CIO) accountable for reducing duplication of efforts across agencies and achieving cost savings.

#### WHY TIGTA DID THE AUDIT

This audit was initiated to determine the IRS's effectiveness in implementing the requirements of the FITARA in relation to its information technology and information resources management responsibilities.

#### WHAT TIGTA FOUND

The Department of the Treasury is responsible for implementing the FITARA. The IRS is responsible for implementing the FITARA to the extent that the Treasury Department has delegated FITARA responsibilities to it.

As of January 2018, the IRS reported that it is using incremental development for 16 of its 17 in-process information technology projects. The Treasury Department has delegated shared acquisition and procurement responsibilities to the IRS CIO to review the acquisition and contract sections in IRS business cases. IRS management explained that the CIO does not perform these reviews. Internal Revenue Manual 2.21.1, Requisition Processing for IT Acquisition Products and Services, Introduction to Requisition Processing for Information

Technology (IT), assigns responsibility to the CIO for all purchases of information technology products and services acquired by the IRS. However, the CIO has delegated the responsibilities to review and approve information technology acquisitions for the IRS Information Technology organization to subordinates. This delegation of authority as it relates to major information technology acquisitions is contrary to the basic principles of the FITARA.

In addition, the IRS has not effectively implemented the provisions of Internal Revenue Manual 2.21.1 enterprise-wide. As a result, controls are not in place to ensure that the Information Technology organization is actively engaged in reviewing, approving, and implementing information technology acquisitions that are initiated or funded by other business operating divisions. Further, the IRS is not fully using lessons learned to improve management of its approximately \$2.6 billion in information technology investments.

#### WHAT TIGTA RECOMMENDED

TIGTA recommended that the CIO should: comply with the Treasury Department's FITARA guidance, which delegates to the IRS CIO responsibility for reviewing the acquisition and contract sections in IRS business cases; establish processes to identify, review, and approve information technology acquisitions supporting major information technology investments enterprise-wide regardless of origination or funding source; and report lessons learned trends to the heads of Information Technology organizations and governance bodies.

IRS management agreed with our recommendations and plans to comply with the Treasury Department's FITARA assignment guidance; develop a process for IRS organizations to obtain approval from the Information Technology organization before taking action to develop or procure information technology; and provide periodic lessons learned analysis reports to program management offices and governance boards for use in recommending and overseeing project management processes.



# DEPARTMENT OF THE TREASURY WASHINGTON, D.C. 20220

July 27, 2018

#### **MEMORANDUM FOR COMMISSIONER OF INTERNAL REVENUE**

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**FROM:** Michael E. McKenney

Deputy Inspector General for Audit

**SUBJECT:** Final Audit Report – Information Technology Investment Management

Controls Should Be Better Aligned With the Federal Information Technology Acquisition Reform Act of 2014 (Audit #201720014)

This report presents the results of our review to determine the Internal Revenue Service's effectiveness in implementing the requirements of the Federal Information Technology Acquisition Reform Act of 2014<sup>1</sup> in relation to its information technology and information resources management responsibilities. This review is included in our Fiscal Year 2018 Annual Audit Plan and addresses the major management challenge of Achieving Program Efficiencies and Cost Savings.

Management's complete response to the draft report is included as Appendix VI.

Copies of this report are also being sent to the Internal Revenue Service managers affected by the report recommendations. If you have any questions, please contact me or Danny R. Verneuille, Assistant Inspector General for Audit (Security and Information Technology Services).

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<sup>&</sup>lt;sup>1</sup> Pub. L. No. 113-291, Title VIII, Subtitle D.



# Table of Contents

Background	Page 1
Results of Review	Page 10
Incremental Development Is Being Used on Major Information Technology Projects	Page 10
Review and Approval Processes Over Major Information  Technology Acquisitions Should Be Improved and  Implemented Enterprise Wide	Dogo 11
Implemented Enterprise-Wide  Recommendations 1 and 2: Page 14	Page 11
Lessons Learned Trends From Post-Implementation Reviews and Operational Analyses Should Be Used to Improve Project Investment Management  Recommendation 3: Page 18	Page 14
Appendices	
Appendix I – Detailed Objective, Scope, and Methodology	Page 19
Appendix II – Major Contributors to This Report	Page 21
Appendix III – Report Distribution List	Page 22
Appendix IV – Information Technology Investments	_
Appendix V – Glossary of Terms	_
Appendix VI – Management's Response to the Draft Report	_



# **Abbreviations**

ACIO Associate Chief Information Officer

CFO Act Chief Financial Officers Act of 1990

CIO Chief Information Officer

CPIC Capital Planning and Investment Control

FITARA Federal Information Technology Acquisition Reform Act of 2014

IRS Internal Revenue Service

IT Information Technology

OMB Office of Management and Budget



# **Background**

In December 2014, Congress enacted the Federal Information Technology Acquisition Reform Act of 2014<sup>1</sup> (FITARA) to improve Federal agencies' major information technology acquisitions as well as hold Chief Information Officers (CIO) accountable for reducing duplication of efforts across agencies and achieving cost savings. The FITARA includes specific requirements in the following seven areas:

- 1) **Federal data center consolidation initiative.** Agencies are required to provide the Office of Management and Budget (OMB) with a data center inventory, a strategy for consolidating and optimizing their data centers, and quarterly updates on their progress.
- 2) **Enhanced transparency and improved risk management.** Agencies are to make detailed information on Federal information technology investments<sup>2</sup> publicly available, and agency CIOs are to categorize their information technology investments by risk.
- 3) **Agency CIO authority enhancements.** Agency CIOs are required to: 1) approve the information technology budget requests for their agencies, 2) certify that information technology investments are adequately implementing OMB's incremental development guidance, 3) review and approve information technology contracts, and 4) approve the appointment of other agency employees with the title of CIO.
- 4) **Portfolio reviews.** Portfolio reviews were established in Fiscal Year 2012 to assess the maturity of Federal information technology portfolio management, consolidate and eliminate duplicative spending on commodity information technology, and improve agency processes to drive mission and customer-focused information technology solutions. The law requires the OMB to develop standardized performance metrics to include cost savings and to submit quarterly reports to Congress on cost savings.
- 5) **Expansion of training and use of information technology acquisition cadres.**Agencies are to update their acquisition human capital plans to address the timely and effective acquisition of information technology. The law calls for agencies to consider establishing information technology acquisition cadres or developing agreements with other agencies that have such cadres.
- 6) **Governmentwide software purchasing program.** The General Services Administration is to develop a strategic sourcing initiative to enhance Governmentwide acquisition and management of software.

<sup>&</sup>lt;sup>1</sup> Pub. L. No. 113-291, Title VIII, Subtitle D.

<sup>&</sup>lt;sup>2</sup> See Appendix V for a glossary of terms.



7) **Maximizing the benefit of the Federal Strategic Sourcing Initiative.** Federal agencies are required to compare their purchases of services and supplies to what is offered under the Federal Strategic Sourcing Initiative.

On June 10, 2015, the OMB issued Memorandum M-15-14, *Management and Oversight of Federal Information Technology*, providing guidance on how Federal agencies were to implement the FITARA. This guidance included actions that agencies were required to take to establish a basic set of roles and responsibilities for CIOs and other senior agency officials, referred to as the common baseline.

The Chief Financial Officers Act of 1990³ (CFO Act) was signed into law on November 15, 1990. It established a leadership structure linked to the OMB's financial management responsibilities, provided for planning for resolving financial systems problems, required audited financial statements, and required the OMB to annually submit a Governmentwide financial management status report to Congress. As required by the CFO Act, the OMB issued guidance that defines Chief Financial Officer responsibilities to include developing and maintaining integrated accounting and financial management systems; directing, managing, and providing policy guidance and oversight of all agency financial management personnel, actives, and operations; and monitoring the financial execution of the agency budget in relation to actual expenditures. CFO Act agencies are subject to the requirements outlined in the FITARA and OMB Memorandum M-15-14.

The Department of the Treasury, a CFO Act agency, is responsible for implementing the FITARA. While the Treasury Department was responsible for developing and submitting a FITARA implementation plan in compliance with OMB guidance, the individual Treasury bureaus were not responsible for developing such plans. The Internal Revenue Service (IRS) is responsible for implementing the FITARA to the extent that the Treasury Department has delegated FITARA responsibilities to it.

To satisfy OMB FITARA guidance, on March 18, 2016, the Treasury Department issued an update to the *U.S. Department of the Treasury FITARA Common Baseline Implementation Plan*. This plan explains the roles, responsibilities, governance bodies, and structures that are at the core of the Treasury Department's FITARA compliance. The baseline states that the ongoing Capital Planning and Investment Control (CPIC) process is a part of the FITARA implementation plan. The CPIC process is a structured, integrated approach to managing information technology investments. It is also the primary process for making investment decisions, assessing investment process effectiveness, and refining investment-related policies and procedures. The CPIC process ensures that all information technology investments align with the agency's mission and support business needs while minimizing risks and maximizing returns throughout the investment's life cycle.

<sup>3</sup> Pub. L. No. 101-576, 104 Stat. 2838 (codified as amended in scattered sections of 5 U.S.C., 31 U.S.C., and 42 U.S.C.).



The CPIC process is comprised of four sequential phases:

- 1) *Pre-Select Phase* The pre-select phase involves prioritizing and aligning information technology investment proposals with enterprise goals, identifying and assessing the mission-based business need for a proposed investment, and eliminating proposals that fail to meet minimal acceptance criteria. IRS personnel review major<sup>4</sup> and nonmajor<sup>5</sup> investments.
- 2) **Select Phase** The select phase consists of selecting projects for funding that are critical to the mission and strategic objectives, are technically viable, and are financially sound.
- 3) *Control Phase* The control phase provides continuous monitoring of information technology investments through the development or acquisition life cycle to ensure that investments are performing as expected.
- 4) *Evaluate Phase* The evaluate phase determines the value of the information technology investment against its mission and performance requirements to gather lessons learned for future investment considerations and to identify potential software development projects as potential candidates for modification, acceleration, replacement, or retirement.

Figure 1 depicts the relationship of the four phases of the CPIC process.

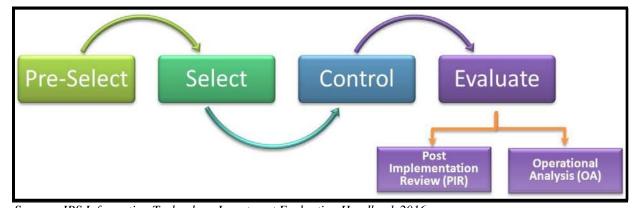


Figure 1: Relationship of the CPIC Process Phases

Source: IRS Information Technology Investment Evaluation Handbook 2016.

On February 1, 2016, the Treasury Department CIO distributed a memorandum, Assignment of Information Technology/Information Resources Management Responsibilities, delegating select

<sup>&</sup>lt;sup>4</sup> The IRS uses the Treasury Department's definition of major information technology investments. Specifically, information technology investments are considered major if they meet at least one of the following criteria: 1) total costs exceed \$50 million for a five-year rolling period of performance, 2) the total annual budget is \$5 million or higher, or 3) more than one bureau is significantly affected.

<sup>&</sup>lt;sup>5</sup> Information technology investments not considered a major investment are classified as nonmajor.



authorities to the CIOs at each Treasury bureau. The memorandum assigned the following information technology and information resource management responsibilities to the IRS CIO:

- 1) **Role in pre-budget submission for programs.** Assigned the responsibility for ensuring the accuracy of information reported to the Treasury Department and expects that information reported to the Treasury Department CIO reconciles with information presented to other offices elsewhere within the Department and externally.
- 2) **Role in planning program management.** Assigned the responsibility for ensuring the accuracy of information reported to the Treasury Department through the existing CPIC process to the Federal Information Technology Dashboard.
- 3) **Review and approval of the major investment portion of budget request.** Assigned the responsibility for providing the Treasury Department CIO with a comprehensive review of spending priorities in accordance with the *Treasury Information Technology Capital Planning and Investment Control Manual*.
- 4) **Ongoing engagement with program managers.** Assigned responsibility for ensuring the accuracy of reported information as well as participating in regular portfolio and investment-level reviews.
- 5) **Visibility of planned expenditure reporting.** Assigned responsibility to ensure complete and accurate planned expenditure reporting for acquisitions with special emphasis on high-impact acquisitions and pending expenditures required for major investments.
- 6) **Definition of processes and policies.** Assigned responsibility for defining development processes, milestones, and overall policies for project management and reporting for resources.
- 7) **Role on program governance boards.** Assigned responsibility for chairing and maintaining component-level governance bodies. Each component will report regularly on its full governance structure.
- 8) **Shared acquisition and procurement responsibilities.** Assigned responsibility for:
  1) designating category managers that will actively participate in Treasury Department information technology category management responsibilities, 2) reviewing and approving of the Federal Acquisition Certification for program and project managers' applications, and 3) reviewing of acquisition and contract sections in business cases, including reporting when these sections are complete and accurate.
- 9) Role in recommending modification, termination, or pause of investments. Assigned responsibility for facilitating modification, termination, or pause of investments, projects, acquisitions, systems, and activities when necessary. The Treasury Department established thresholds for mandatory TechStat reviews through the *Treasury Information Technology Capital Planning and Investment Control Manual*. A TechStat review is a



face-to-face, evidence-based accountability review of a major information technology investment that results in concrete actions to address weaknesses and is designed to reduce wasteful spending by turning around troubled programs and terminating failed programs sooner.

10) **Review and approval of acquisition strategy and acquisition plan.** Assigned responsibility for the review of acquisition and contract sections in major business cases, including reporting when these sections are complete and accurate.

On November 21, 2017, Congress passed the FITARA Enhancement Act of 2017,<sup>6</sup> repealing the expiration dates for provisions of the FITARA pertaining to portfolio reviews and management reporting of cost, schedule, performance, and risks, thus making these provisions permanent. In addition, the law extended the FITARA provision related to the Federal data center consolidation initiative.

#### IRS information technology investment governance

The IRS investment portfolio as of September 30, 2017, reported information technology investments valued at approximately \$2.6 billion. The IRS's Senior Executive Team is an enterprise-wide governance body with the authority to address, prioritize, and present actions that affect tax administration matters and effective management of the IRS investment portfolio. It evaluates and recommends enterprise-level programs, budgets, and investment decisions to the IRS Commissioner and Deputy Commissioners.

The Information Technology (IT) organization recently reorganized its information technology governance structure to include three executive steering committees – Strategic Development, Sustaining Operations, and Infrastructure – to oversee investments in the IRS portfolio. While the portfolio of investments, programs, and projects that each executive steering committee governs differs, the authorities and responsibilities of the executive steering committees collectively include:

- Approving the baseline information technology scope and schedule based on established funding and targeted business results.
- Approving the escalation of unmitigated program and project risks and issues.
- Approving project shutdowns.
- Approving the deployment of infrastructure information technology assets into production.

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<sup>&</sup>lt;sup>6</sup> Pub. L. No. 115-88.

<sup>&</sup>lt;sup>7</sup> See Appendix IV for a listing of IRS information technology investments and projects as of September 30, 2017.



The IT organization governance structure also includes two independent governance boards for the Customer Account Data Engine 2 and Revenue Protection Technology investments. Figure 2 depicts the current governance structure overseeing information technology investments.

Figure 2: Information Technology Governance Structure

Source: IRS Information Technology Governance Structure provided by the Investment and Portfolio Control Oversight Directorate, dated May 2, 2018. ACIO – Associate Chief Information Officer, CADE2 – Customer Account Data Engine 2, EGB – Executive Governance Board, FY – Fiscal Year, Q – Quarter, RPT – Revenue Protection Technology.

Within the IT organization, the Strategy and Planning organization is the steward of the IRS's information technology investment management. It is responsible for coordinating the CPIC process to help ensure that:

- The decision-makers have timely, accurate, and consistent information to enable them to identify, prioritize, and manage information technology investments.
- The CPIC process complies with legislative mandates and executive guidance.
- Information reported to oversight bodies is accurate.

The Financial Management Services directorate supports the Strategy and Planning organization by identifying, providing input on, and tracking funded IRS portfolio investments. It supports the investment planning and management process by providing guidance and direction on Federal budget and financial policy related to information technology investments and operations. Its mission is to provide executive leadership and direction in all matters pertaining



to budget and financial policy, formulation and financial analysis, and expense management across the IT organization and the IRS.

The Investment and Portfolio Control and Oversight directorate supports the Strategy and Planning organization by monitoring investments that are operational and evaluating projects of major information technology investments after they have been deployed as well as evaluating major information investments that have been in operations and maintenance for at least 12 months. It also manages investment governance, analyzes investment performance metrics, and facilitates investment management reporting. Figure 3 shows a partial organizational overview of the Strategy and Planning organization.

Figure 3: Partial Overview of the Strategy and Planning Organization



Source: Strategy and Planning organizational chart on the IRS Intranet as of December 1, 2017.

#### The FITARA Scorecard

The House Oversight and Government Reform Committee worked alongside the Government Accountability Office to develop a scorecard to assess Federal agency FITARA implementation efforts, assigning a grade from A to F based on self-reported data at the department level. This bipartisan scorecard has been issued biannually beginning in November 2015.

In November 2017, the Committee issued a FITARA Scorecard and graded agency implementation of the following five key FITARA categories:

- Agency CIO Authority Enhancements (Incremental).
- Transparency and Risk Management.
- Information Technology Portfolio Review.
- Data Center Optimization Initiative.
- Software Licensing.



Figure 4 is a summary of the Treasury Department's FITARA scores from November 2015 to November 2017. In November 2017, the Treasury Department improved its scores in the CIO Authority Enhancements (Incremental) and Information Technology Portfolio Review categories. The CIO Authority Enhancements (Incremental) category improved over the June 2017 FITARA Scorecard, and the Information Technology Portfolio Review category received its highest score out of all the prior scorecards. However, because the Treasury Department scored an F in the newly graded category of Software Licensing, its overall score remained a C-.

Figure 4: Summary of the Treasury Department's FITARA Scorecards (November 2015 – November 2017)

	Dates and Grades <sup>8</sup>				
Category	November 2015	May 2016	December 2016	June 2017	November 2017
CIO Authority Enhancements (Incremental) <sup>9</sup>	D	D	D <sup>10</sup>	F	D <sup>11</sup>
Transparency and Risk Management <sup>12</sup>	D	D	D <sup>13</sup>	С	С
Information Technology Portfolio Reviews <sup>14</sup>	В	С	В	В	А
Data Center Optimization Initiative <sup>15</sup>	F	D	С	В	В
Software Licensing	N/A	N/A	N/A	N/A	F
Overall Grade	D	D	C-	C-	C-

Source: House Committee on Oversight and Government Reform November 2015, May 2016, December 2016, June 2017, and November 2017 FITARA Scorecards.

<sup>&</sup>lt;sup>8</sup> Grades are presented using the letters A, B, C, D, and F (with A being the highest and F being the lowest grade).

<sup>&</sup>lt;sup>9</sup> Prior scorecards referred to this measure as Incremental Development.

<sup>&</sup>lt;sup>10</sup> On the FITARA Scorecard 3.0 (December 2016), it shows that the data underlying the CIO Authority Enhancements measure were as of August 2016 (not December 2016).

<sup>&</sup>lt;sup>11</sup> In January 2018, the IRS discovered that the calculation for the CIO Authority Enhancements (Incremental) category used incorrect data from the Federal Information Technology Dashboard, causing the Treasury Department's reported score to be inaccurate. We discuss this issue in further detail later in the report.

<sup>&</sup>lt;sup>12</sup> Prior scorecards referred to this measure as Risk Assessment Transparency.

<sup>&</sup>lt;sup>13</sup> On the FITARA Scorecard 3.0 (December 2016), it shows that the data underlying the Transparency and Risk Management measure was evaluated as of as of August 2016 (not December 2016).

<sup>&</sup>lt;sup>14</sup> Prior scorecards referred to this measure as Portfolio Review Savings.

<sup>&</sup>lt;sup>15</sup> Prior scorecards referred to this measure as Data Center Consolidation or Federal Data Center Consolidation.



This review was performed at the Strategy and Planning organization offices in the New Carrollton Federal Building in Lanham, Maryland, during the period December 2016 through May 2018. 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.



# Results of Review

Congress enacted the FITARA to improve Federal agencies' major information technology acquisitions. The basic principles of the FITARA are to improve CIO approval authority over information technology purchases and to empower Government CIOs with the authority to eliminate unnecessary information technology spending. Congressional staffers involved in writing the FITARA legislation believed that this attribute, consolidating CIO authority over information technology spending, was the single most important factor in empowering CIOs and was the basis for the legislation. While the applicability of the FITARA applies to the IRS's CIO only to the extent that FITARA responsibilities have been delegated by the Treasury Department, the IRS could do more to voluntarily follow the intent of the FITARA, thereby improving management of its information technology investment portfolio.

# Incremental Development Is Being Used on Major Information Technology Projects

OMB Memorandum M-15-14 states that the CIO defines the development process, milestones, and the overall policies for all capital planning, enterprise architecture, and project management and reporting for information technology resources. At a minimum, these processes shall ensure that the CIO certifies that information technology resources are adequately implementing incremental software development. The OMB defines adequate incremental development of software or services as planned and actual delivery of new or modified technical functionality to users occurring at least every six months. This CIO certification of incremental development is currently reported on the FITARA Scorecard under the category of CIO Authority Enhancements (Incremental). An agency's score is the percentage of an agency's major information technology investments under development that delivered functionality every six months.

Incremental software development offers the benefits of:

- Delivering capabilities to users more rapidly.
- Increasing the likelihood that individual projects will achieve cost, schedule, and performance goals.
- Obtaining additional feedback from users, increasing the probability that each successive increment will meet the user's needs.
- Terminating a poorly performing investment with fewer costs.

The *IRS Enterprise Transition Plan, Release 2017*, dated September 30, 2016, describes an information technology initiative known as rapid development. The purpose of this initiative is to improve agile development and shorten the software development cycle. The rapid



development initiative involves Development and Operations (DevOps), a modern software development practice that harmonizes agile development, user experience, and security in order to shorten the software development cycle, increase software release speed, improve software defect detection, and reduce risks.

As of November 7, 2017, the date of the latest FITARA Scorecard, the Treasury Department investment portfolio data reported on 38 IRS development projects, 11 of which were incrementally developing software or services at least every six months. Examples of some incremental software development projects included Modernized e-File Releases 10 and 10.1, Affordable Care Act Administration Release 6.1, Foreign Account Tax Compliance Act Releases 5.0 and 6.0, and the Individual Master File 2017 Mid-Year Conversion.

However, during subsequent discussions with the IRS about the November 2017 FITARA Scorecard, the IRS discovered that, based on its review of actual project start and completion dates, information used in the Treasury Department's FITARA score for the incremental development calculation were incorrect. We recalculated the incremental development measure using the corrected information and found that the IRS was using incremental development on 16 of its 17 in-process projects as of January 30, 2018. This calculates to a 94 percent, or a grade of A. There were 12 completed projects incorrectly included in the incremental development calculation for the November 2017 FITARA Scorecard. The Treasury Department subsequently notified the OMB of this discrepancy, to which the OMB replied that the software logic calculating the in-process indicator wasn't working properly and that a code fix was needed to properly reflect in-process and completed projects.

# Review and Approval Processes Over Major Information Technology Acquisitions Should Be Improved and Implemented Enterprise-Wide

The IRS's ability to voluntarily achieve one of the key guiding principles of the FITARA, which is to establish CIO authority over the review and approval of major information technology acquisitions, was weakened by the following three conditions.

1) The IRS CIO does not review the acquisition and contract sections in the business cases as required by the Treasury Department's FITARA responsibilities assignment memorandum.

The FITARA provides that a covered agency may not enter into a contract or other agreement for information technology or information technology services that are associated with major investments unless the contract or other agreement has been reviewed and approved by the CIO of the agency. As an alternative, the FITARA also

<sup>&</sup>lt;sup>16</sup> Between the time that the November 2017 Scorecard was issued and our recalculation of the incremental development score, the IRS reported that it closed 22 projects and started 13 new ones. Removing the additional 12 completed projects incorrectly included in the initial incremental development calculation results in 17 in-process projects as of January 30, 2018.



states that an agency may use its governance processes to approve any information technology contract as long as the agency's CIO is a full participant in the governance process. In addition, the OMB further clarified in Memorandum M-15-14 that, if information technology contracts are incorporated into acquisition strategies or plans, the CIO can review the acquisition strategy or plans. Further, the Treasury Department's FITARA responsibilities assignment memorandum delegates the responsibility to review the acquisition and contract sections in business cases to each Treasury bureau's CIO.

The IRS informed us that the IRS CIO does not review the acquisition and contract sections in the business cases. To comply with this requirement, the ACIO, Strategy and Planning, annually presents business cases for major investments to the CIO containing high-level contract and acquisition data. However, these high-level acquisition data do not include vendors' names, the purpose of the contracts, or contract dollar amounts. We believe the high-level presentation of business cases does not satisfy the Treasury Department's delegation of responsibility to the IRS CIO to review the acquisition and contract sections in business cases.

2) The IRS CIO has broadly delegated the responsibilities to review and approve major information technology acquisitions for the IRS IT organization to subordinates. This delegation of authority as it relates to major information technology acquisitions is contrary to the basic principles of the FITARA.

Internal Revenue Manual 2.21.1, *Requisition Processing for IT Acquisition Products and Services, Introduction to Requisition Processing for Information Technology (IT)*, dated April 11, 2017, states that the IRS CIO has the responsibility for all purchases of information technology products and services acquired by the IRS. Further, the IRS issued delegation order MITS 2-1-1 (Rev 1.), dated September 26, 2011, which states that the CIO delegates:

- Unlimited information technology approval authority to the Deputy CIOs, ACIOs, and Deputy ACIOs for acquisitions of information technology goods and services.
- Up to \$500,000 approval authority to executives that report to the ACIOs and Deputy ACIOs.
- Up to \$50,000 approval authority to the first line information technology supervisors for specific types of purchases.

IRS management officials advised us that they are currently updating this delegation order to reflect the current IT organizational structure, but they do not plan to change these position titles or dollar thresholds.

3) The IRS has not effectively implemented the provisions of Internal Revenue Manual 2.21.1 enterprise-wide.



The controls necessary to implement Internal Revenue Manual 2.21.1 are not in place to ensure that the IRS IT organization is actively engaged in reviewing, approving, and implementing information technology acquisitions that are initiated or funded by other business operating divisions. These controls are needed to ensure that the IRS IT organization is engaged in the information technology product or service procurement process prior to the IRS signing the contract.

For example, our review of the Equifax \$7 million requisition, solicitation, and order, dated October 1, 2017, determined that this acquisition enabled the IT organization to provide various data transaction types using the vendor's proprietary databases to verify the identities of taxpayers. As such, this information technology acquisition was managed by a Contracting Officer from the Office of Procurement, Office of Information Technology Acquisitions, used the General Services Administration's <sup>17</sup> Professional Services Schedule 520 for business information services, and required IRS information technology resources to integrate the vendor's authentication services into the IRS information technology infrastructure. This information technology–related acquisition was initiated, funded, and approved by management officials in the Services and Enforcement organization.

Although Internal Revenue Manual 2.21.1 delegates the authority over all purchases of information technology products and services acquired by the IRS to the CIO, management officials in the IT organization did not review and approve this Equifax information technology acquisition. In our discussions with the IRS, IT organization management disagreed that the Equifax contract was an information technology-related contract. In their view, this was a business information services contract that would not require review or approval from the CIO. We disagree with their opinion and believe that it is these as well as other types of major information technology acquisitions that the FITARA legislation intended to put under the CIO's purview.

IT organization management advised us that, while they are in the process of implementing a "light-touch" policy<sup>18</sup> and supporting procurement controls, these controls have not yet been fully implemented. Supporting procurement controls will include implementation of the IRS's May 1, 2018, memorandum, *Information Technology (IT) Products and Services*, to ensure that information technology acquisitions, which are not funded by the IT organization, are submitted to the CIO for review and approval.

<sup>17</sup> The General Services Administration's acquisition solutions offer private sector professional services, equipment, supplies, and information technology to Government organizations and the military.

<sup>18</sup> The light-touch policy allows the IT organization to capitalize on the service benefits provided by outsourcing maximum responsibilities to a vendor within the constructs of leveraging existing contracts to quickly deploy services or securing new procurements with information technology support.



In summary, inadequate review of the acquisition and contract sections in the business cases, delegation of approval authority to subordinates for information technology acquisitions, and ineffective enterprise-wide implementation of CIO responsibility over all IRS information technology purchases, limits the IRS CIO's ability to exercise authority over the review and approval of major information technology acquisitions. These conditions are contrary to the basic principles of the FITARA, which are to improve CIO approval authority over information technology purchases and eliminate unnecessary information technology spending.

#### Recommendations

#### The CIO should:

Recommendation 1: Comply with the Treasury Department's FITARA guidance, which delegates to the IRS CIO responsibility for reviewing the acquisition and contract sections in IRS business cases.

<u>Management's Response</u>: The IRS agreed with this recommendation and will establish a process to comply with the Treasury Department's FITARA assignment guidance.

<u>Recommendation 2</u>: Establish processes to identify, review, and approve information technology acquisitions supporting major information technology investments enterprise-wide regardless of origination or funding source.

<u>Management's Response</u>: The IRS agreed with this recommendation and will develop a process that implements the May 1, 2018, Deputy Commissioner for Operations Support and Deputy Commissioner for Services and Enforcement memorandum, *Information Technology (IT) Products and Services*. The purpose of the memorandum is to remind IRS organizations to obtain approval from the IT organization before taking action to develop or procure information technology.

# Lessons Learned Trends From Post-Implementation Reviews and Operational Analyses Should Be Used to Improve Project Investment Management

The Treasury Department's *Information Technology Capital Planning and Investment Control Manual*, dated December 2008, states that post-implementation reviews provide a forum for identifying lessons learned from investments that are performing a specific aspect so that other investments may benefit from their experience. Documenting lessons learned will enable agencies to improve the management of current and future information technology investments. In addition, the *Manual* states that lessons learned should include lessons from planning through initial deployment and problem resolution. They should also identify reasons for adjustments to planned functionality, schedule, cost, and quality targets.



The *IRS Information Technology Investment Evaluation Handbook*, dated July 2016, states that a post-implementation review provides decision-makers with lessons learned so they can improve investment decision-making processes. The *Handbook* also says that one of the primary objectives of a post-implementation review is to ensure continual improvement of an agency's capital programming processes based on lessons learned. The IRS Investment and Portfolio Control and Oversight directorate performs these post-implementation activities in the evaluate phase of the CPIC process. The evaluate phase is composed of two subprocesses: 1) the post-implementation review process, completed semiannually, and 2) the operational analysis process, completed annually.

#### **Post-implementation review**

This is the process of reviewing information technology investments to determine whether the expected performance and financial benefits anticipated in the business case have been realized. The post-implementation review process is required for all projects of major information technology investments which have:

- Fully exited the acquisition phase and moved into the operations and maintenance phase for at least 30 calendar days.
- Implemented a useful project, *e.g.*, major release, system modification, or operational component of significant functionality.
- Retired or terminated during either the development or operations phase.

The post-implementation review assesses cost, schedule, stakeholder satisfaction, internal business, strategic and business results, innovation, and risk management. Lessons learned are identified and added to the IT organization's Lessons Learned Repository and categorized and summarized by primary topics.

After the post-implementation review data have been collected and analyzed against identified assessment criteria, the Investment and Portfolio Control and Oversight directorate prepares the post-implementation review report and shares the final results with all the Strategy and Planning directorate areas, all affected ACIOs, program managers and business owners, the CIO's office, and the Chief Financial Officer's office. After sharing the final report internally, the IRS transmits the report to the Treasury Department. The results of the post-implementation review help formulate recommendations and lessons learned as well as provide feedback to the pre-select, select, and control phases of an investment. Based on our review of a judgmental sample of five projects from the Calendar Year 2016 Post-Implementation Review, we conclude that the IRS is effectively performing post-implementation reviews.

<sup>19</sup> A judgmental sample is a nonprobability sample, the results of which cannot be used to project to the population.



#### **Operational analysis**

An operational analysis is the process of reviewing the performance of an operational, or in other words steady-state, investment and measuring its performance against cost, schedule, and performance goals. The operational analysis should trigger considerations of how the investment's objectives could be better met, how costs could be reduced, and whether the organization should continue performing a particular function. Its objective is to provide management with a tool to facilitate the following decision on the status of the investment:

- The investment is performing as expected and should remain in steady-state for the foreseeable future.
- The investment team should plan for a development/modernization/enhancement initiative in order to ensure continued investment viability.
- The investment is not meeting its performance goals as identified within the scope of the operational analysis and should be decommissioned and replaced.

The operational analysis process focuses on assessing financial performance, performance goals, stakeholder satisfaction, strategic and business results, innovation, and risk management. Lessons learned are identified and added to the IT organization's Lessons Learned Repository and categorized and summarized by primary topics.

The operational analysis process is required annually for all steady-state major investments and the steady-state portion of major investments with mixed life cycles. Information technology investments that have already been identified as requiring replacement are exempt from completing an operational analysis. The Investment and Portfolio Control and Oversight directorate analyzes the data annually and shares the final report with all of the Strategy and Planning organization's directorate areas, all affected ACIOs, program managers and business owners, the CIO's office, and the Chief Financial Officer's office. After sharing the final results report internally, the report is transmitted to the Treasury Department. The results of the operational analysis help to formulate recommendations and identify lessons learned. Based on our review of the Calendar Year 2016 Operational Analysis Review that included data on costs, performance, and risks, we conclude that the IRS is effectively performing operational analysis reviews.

#### Lessons learned

The Investment and Portfolio Control and Oversight directorate incorporates lessons learned into both its post-implementation review and operational analysis reports. The Strategy and Planning organization also maintains a Lessons Learned Repository, which is populated with lessons learned from the information technology projects' post-implementation and operational analysis reviews. During our review, we asked Investment and Portfolio Control and Oversight management how they ensure that key lessons learned during the post-implementation reviews and operational analyses are used to guide future development.



Management officials said that they conducted a February 16, 2016, workshop for information technology project managers to explain what lessons learned are, how lessons learned are used, information about the resources in the Lessons Learned Repository, and the lessons learned process cycle with real-world examples. The focus of this one-time workshop was how to create effective lessons learned, but it did not discuss actual lessons learned by IRS project managers.

In Fiscal Year 2013, the Strategy and Planning organization created a report, *Lessons Learned* — *The Critical Few Successes and Shortfalls Fiscal Year* 2010 – *Fiscal Year* 2012, that examined three years of information technology project lessons learned, highlighted successful practices, and recommended strategies to improve performance. Figure 5 graphically summarizes the report's lessons learned trends. It lists the categories of lessons learned, with percentages for each category, along with detailed lessons within each category. For example, for the lessons learned category "Schedule," one shortfall captured pertained to "Critical tasks were not included."

**Shortfall Factors** Technical (10%) Schedule (10%) Documentation (12%) Communication (12%) Requirements (13%) Accessibility Lack of communication plan Not clearly defined Version issues Not communicated to Lack of stakeholder Permissions Continuous rebaselining Lack of review time stakeholders involvement Administrator Not tracked Critical tasks not included Decisions not communicated Not planned in schedule availability Lack of Change Lack of docume Lack of knowledge transfer Managen oor deliverable planning Storage Not in Business Systems Repository No single POC in meetings Not managed Change pages not included Requirements Report **Project Shortfalls** Resources CTR MBI and computer Lack of parallel test Change control Unique Lessons Fundina Not defined/clear KISAM/ITAM ticketing Test data creation HW/SW lengthy process **Decision Making** Accountability Estimation Vendor SME unavailable Conflicting guidance CM enforcement Training Shared resources Issues caused delays UWR No PMO Reorganization**→** Other (18%) Testing (6%) Process (6%) Roles & Respons. (7%) Procurement (7%)

Figure 5: Information Technology Lessons Learned Trends for Fiscal Years 2010 Through 2012

Source: IRS Strategy and Planning Analysis of Lessons Learned Fiscal Years 2010 Through 2012, dated May 2013. CM – Configuration Management, CTR – Contract Technical Representative, HW – Hardware, ITAM – Information Technology Asset Management, KISAM – Knowledge Incident/Problem Service Asset Management, MBI – Minimum Background Investigation, PMO – Program Management Office, POC – Point of Contact, SME – Subject Matter Expert, SW – Software, UWR – Unified Work Request.

Strategy and Planning management explained that they only developed this lessons learned trend analysis report one time. However, they stated that they are looking to take a more proactive



approach in how to communicate lessons learned trends and how best to inform the executive steering committees having CPIC process oversight. Without fully using lessons learned to improve the CPIC process, IRS investment management will potentially not benefit from the experience learned by overcoming recurring problems, will repeat prior mistakes, and will not continually improve its CPIC activities.

Management Action: The Application Development organization's Data Management and Quality Assurance team and the Investment and Portfolio Control and Oversight directorate held a briefing on December 14, 2017, on lessons learned and communicated the expectation that project teams should identify, capture, report, and review lessons learned during their projects' life cycles. The team also increased its presence at project kickoff, milestone review, and milestone exit meetings to stress the importance of integrating lessons learned into a project's life cycle. These actions were taken after we brought the issue to management's attention in October 2017.

#### Recommendation

<u>Recommendation 3</u>: The CIO should report lessons learned trends to the heads of IT organizations and governance bodies for consideration in recommending and overseeing changes to project management processes.

**Management's Response:** The IRS agreed with this recommendation. Beginning in Fiscal Year 2019, the Lessons Learned Team will develop and provide periodic lessons learned analysis reports (successes and shortfalls) to program management offices and governance boards for use in recommending and overseeing project management processes.



# **Appendix I**

# Detailed Objective, Scope, and Methodology

The overall objective of this review was to determine the IRS's effectiveness in implementing the requirements of the FITARA¹ in relation to its information technology and information resources management responsibilities. To accomplish our objective, we:

- I. Determined the effectiveness of the IRS's information technology governance as related to the FITARA.
  - A. Reviewed IRS management reporting on the FITARA to the Treasury Department's CIO Council by documenting the IRS FITARA strategies, trends, key decisions, and problems encountered.
  - B. Obtained an understanding of the changing IRS governance structure and conducted interviews with IRS personnel to obtain an understanding of the governing bodies that have oversight over the CPIC process.<sup>2</sup>
  - C. Reviewed and evaluated the IRS's CPIC roles and responsibilities.
  - D. Determined whether the IRS has successfully satisfied its FITARA governance responsibilities as laid out in the Treasury Department's CIO assignment memorandum.
- II. Determined the effectiveness of the IRS's processes in recommending modification, termination, or suspension of information technology investments as related to the FITARA.
  - A. Assessed whether the controls were in place for the control phase of the CPIC process.
    - 1. Reviewed CPIC guidance documents related to the control phase and interviewed appropriate Investment and Portfolio Control and Oversight personnel to walk through the control phase controls.
    - 2. Determined the process the IRS uses to monitor interim investment performance results and compared the interim performance results against the estimates to ensure that investments are progressing as expected.

<sup>&</sup>lt;sup>1</sup> Pub. L. No. 113-291, Title VIII, Subtitle D.

<sup>&</sup>lt;sup>2</sup> See Appendix V for a glossary of terms.



- B. Assessed whether the controls were in place for the evaluate phase of the CPIC process.
  - 1. Reviewed CPIC guidance documents related to the evaluate phase and interviewed appropriate Investment and Portfolio Control and Oversight personnel to walk through the evaluate phase controls.
  - 2. Determined whether the IRS effectively performed required post-implementation reviews for major information technology investments and incorporated lessons learned back into the CPIC process.
  - 3. Determined whether the IRS effectively performed required operational analyses for major information technology investments and incorporated lessons learned back into the CPIC process.

#### Internal controls methodology

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined that the following internal controls were relevant to our audit objective: Internal Revenue Manual 2.21.1, *Requisition Processing for IT Acquisition Products and Services, Introduction to Requisition Processing for Information Technology (IT)*; the information technology governance structure, roles, and responsibilities over the CPIC process; post-implementation reviews; and operational analyses as well as policies and procedures related to management and reporting of information technology investment management portfolios. We evaluated these controls by conducting interviews with management and staff as well as reviewing related documentation.



### **Appendix II**

# Major Contributors to This Report

Danny R. Verneuille, Assistant Inspector General for Audit (Security and Information Technology Services)
Bryce Kisler, Director
Carol Taylor, Audit Manager
Allen Henry, Lead Analyst
Richard Pinnock, Senior Auditor
Wallace Sims, Senior Auditor
Carlos Parada-Cardenas, Auditor



### **Appendix III**

# Report Distribution List

Deputy Commissioner for Operations Support Chief Information Officer Chief, Procurement Deputy Chief Information Officer for Operations Associate Chief Information Officer, Strategy and Planning Director, Investment Control and Portfolio Oversight Director, Office of Audit Coordination



# **Appendix IV**

# Information Technology Investments (as of September 30, 2017)

Investment Type and Investments in Each Type	Executive Steering Committee	Budgeted Amount for Fiscal Year 2017
Investment Type: Major		
Account Management Services	Sustaining Operations	\$14,900,679
Affordable Care Act Administration	Sustaining Operations	\$206,925,749
Customer Account Data Engine 2	Customer Account Data Engine 2	\$129,683,671
Enterprise Case Management	Strategic Development	\$34,532,829
e-Services	Sustaining Operations	\$10,390,607
Foreign Account Tax Compliance Act	Strategic Development	\$58,415,384
Individual Master File	Sustaining Operations	\$14,951,603
Integrated Customer Communication Environment	Sustaining Operations	\$11,600,548
Integrated Submission and Remittance Processing System	Sustaining Operations	\$10,067,781
Integrated Data Retrieval System	Sustaining Operations	\$15,172,255
Integrated Financial System/CORE Financial System	Strategic Development	\$16,353,348
IRS.gov – Portal Environment	Infrastructure	\$96,837,305
Modernized e-File	Sustaining Operations	\$56,810,397
Return Review Program	Revenue Protection	\$90,065,876
Service Center Recognition Imaging Processing System	Sustaining Operations	\$8,946,052
Web Applications	Strategic Development	\$36,358,331
Total Major Investments		\$812,012,415



Investment Type and Investments in Each Type	Executive Steering Committee	Budgeted Amount for Fiscal Year 2017
Investment Type: Standard <sup>1</sup> and Nonstandard <sup>2</sup>		
Cybersecurity Operations, Risk Management, and Implementation	Infrastructure	\$190,240,783
Authentication, Authorization, Access	Strategic Development	\$27,363,326
IRS End User Systems and Support	Infrastructure	\$230,991,858
Mainframes and Servers Services and Support	Infrastructure	\$473,655,361
IRS Telecommunications Systems Support	Infrastructure	\$334,900,676
Information Technology Management Investment	CIO	\$133,659,763
Total Standard/Nonstandard Investments		\$1,390,811,767
Total Investment Type: Nonmajor <sup>3</sup>		\$386,014,837
GRAND TOTAL (All Investments)		\$2,588,839,019

Source: Fiscal Year 2019 Congressional Justification Budget Request – Fiscal Year 2017 Actuals, Financial Management System Investment Control Chart.

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<sup>&</sup>lt;sup>1</sup> Standard investments are information technology infrastructure investments that have been disaggregated to their discrete components and managed separately.

<sup>&</sup>lt;sup>2</sup> Nonstandard investments are existing major or nonmajor investments that have not been realigned with standard investments.

<sup>&</sup>lt;sup>3</sup> Examples of nonmajor investments are Enterprise Services, Applications Development Program Support, and the Integrated Production Model.



# **Appendix V**

# Glossary of Terms

Term	Definition
Acquisition Human Capital Plan	Provides guidance on human capital priorities by analyzing the gaps between the current state of human capital and the desired future state and prioritizing initiatives to address the gaps.
Acquisition Life Cycle	Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract.
Agile Development	Software development methodology, based on iterative and incremental development, by which requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. Agile promotes development, teamwork, collaboration, and process adaptability throughout the life cycle of the project.
<b>Business Case</b>	Structured proposal for business improvement that functions as a decision package for organizational decision-makers. Includes an analysis of business process performance and associated needs or problems, proposed alternative solutions, assumptions, constraints, and a risk-adjusted cost-benefit analysis.
Category Managers	The Treasury Department CIO assigned responsibility to component CIOs to designate information technology category managers who will actively participate in Treasury Department information technology category management responsibilities. See the definition for Information Technology Category Management to see the role of category managers.
Commodity Information Technology	Includes services such as information technology infrastructure (data centers, networks, desktop computers, and mobile devices); enterprise information technology systems (e-mail, collaboration tools, identity and access management, security, and web infrastructure); and business systems (finance, human resources, and other administrative functions).



Term	Definition
Covered Agency	CFO Act agencies and their divisions and offices are subject to the requirements outlined in the FITARA. Covered agencies are agencies listed in 31 U.S.C. § 901 (b)(1) and (b)(2).
Development and Operations (DevOps)	A change in information technology culture, focusing on rapid information technology service delivery through the adoption of agile development in the context of a system-oriented approach. DevOps emphasizes people (and culture) and seeks to improve collaboration between operations and development teams.
Development/ Modernization/ Enhancement	New systems development or modernization to existing or legacy systems that improve organizational capability or performance; changes mandated by legislation or agency leadership; and personnel costs for project management and direct support.  Development/Modernization/Enhancement initiatives can include both systems and infrastructure projects.
Enterprise Architecture	An integrated framework for evolving or maintaining existing information technology and acquiring new information technology to achieve the organization's strategic and business goals. A complete enterprise architecture should consist of both logical and technical components. The logical architecture provides the high-level description of the organization's mission, functional requirements, information requirements, system components, and information flows among the components. The technical architecture defines the specific information technology standards and rules that will be used to implement the logical architecture.
Federal Acquisition Certification	A certification that can be obtained by Government professionals performing contracting and procurement activities and functions. The purpose of this program is to establish general education, training, and experience requirements for those contracting professionals.
Federal Information Technology Dashboard	Launched on June 1, 2009, to provide Government agencies and the public with the ability to view online details of Federal information technology investments and to track their progress over time. The Dashboard displays data received from agency information technology portfolio and business case reports, including general information on over 7,000 Federal information technology investments and detailed data for over 700 of those investments that agencies classify as "major."



Term	Definition
Federal Strategic Sourcing Initiative	Implemented strategic sourcing solutions for the Government for achieving proven results that include cost savings, improved management visibility, and adoption of industry and Government agency best practices.
Incremental Development	For the development of software or services, defined as planned and actual delivery of new or modified technical functionality to users occurring at least every six months.
Information Technology Acquisition Cadre	A specialized cadre generally composed of highly trained, experienced acquisition professionals. At a minimum, cadres require the skills of contracting officers and contracting specialists, program managers, and contracting officer's representatives.
Information Technology Category Management	A purchasing approach that the Federal Government uses to buy smarter and more like a single enterprise. It involves: 1) identifying core categories of products and services and managing them accordingly, 2) cultivating and maximizing expertise to inform and enhance a customer's buying experience, and 3) developing purchasing strategies so that customers find the best value for the items they need.
Information Technology Investment	The expenditure of resources on selected information technology or information technology—related initiatives with the expectation that the benefits from the expenditure will exceed the value of the resources expended.
Information Technology Project	An organizational initiative that employs or produces information technology assets. Each project has or will incur costs, expects or will realize benefits, has a schedule of project activities and deadlines, and has or will incur risks.
Major Investment	Treasury Department criteria states that major information technology investments have an annual cost equal to or greater than \$5 million, have total costs exceeding \$50 million for a five-year rolling period of performance, or significantly affect more than one bureau.
Mixed Life Cycle	An investment that has both development/modernization/ enhancement and steady-state aspects. For example, an investment with mixed life cycles could include a prototype or module of a system that is operational with the remainder of the system in development/modernization/enhancement stages or a service contract for steady-state on the current system with a development/ modernization/enhancement requirement for system upgrade or replacement.



Term	Definition
Nonmajor Investment	Treasury Department criteria states that information technology investments (or projects) not meeting the major investment criteria are considered nonmajor investments.
Portfolio	The combination of all information technology assets, resources, and investments owned or planned by an organization in order to achieve its strategic goals, objectives, and mission.
Portfolio Review	Established in Fiscal Year 2012 to assess the maturity of Federal information technology portfolio management, consolidate and eliminate duplicative spending on commodity information technology, and improve agency processes to drive mission and customer-focused information technology solutions. A portfolio review is an evidence-based, data-driven review of agency information technology portfolio management with agency leadership that continues to drive significant cost savings and efficiencies.
Software Development Cycle	The software development approach used to manage and effect business change, referred to by the IRS as the Enterprise Life Cycle. This life cycle provides the direction, processes, tools, and assets for accomplishing business change in a repeatable and reliable manner.
Steady-State	Investments that include all routine maintenance and operational costs at a current capability and performance level, including costs for personnel, maintenance of existing information systems, corrective software maintenance, voice and data communications maintenance, and replacement of broken information technology equipment.



### **Appendix VI**

# Management's Response to the Draft Report



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

JUL 0 2 2018

MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM:

SUBJECT:

Draft Audit Report - Information Technology Investment

Management Controls Should Be Better Aligned with the Federal

Information Technology Acquisition Reform Act of 2014.

(Audit # 201720014) (e-trak # 2018-03638)

Thank you for the opportunity to comment on the draft audit report. We appreciate and acknowledge the Treasury Inspector General for Tax Administration (TIGTA) audit team for their work on this audit, and for including many of our suggested changes in the report.

The Internal Revenue Service has made significant progress in using incremental software development practices. In fact, 16 of our 17 major investments include incrementally developed software, a statistic which if systemic issues in the reporting tool had not been present, would have resulted in an "A" grade on the Treasury Department's Federal Information Technology Acquisition Reform Act (FITARA) scorecard. We appreciate TIGTA recognizing this accomplishment as well as the systemic issues that are outside of IRS' or Treasury's control, but which we have reported need attention.

The IRS takes FITARA responsibilities very seriously and is working closely with the Department of Treasury to update related guidance and processes. Specifically related to the review and approval of information technology products and services.

The IRS Chief Information Officer (CIO) reviews the most important or sensitive contract and acquisition actions, is actively engaged throughout the funding and budget processes, and reviews and approves all funding requests that are aligned to the acquisitions for IRS Information Technology (IT) investments.



2

To strengthen CIO oversight, IRS issued a memorandum to all IRS organizations on May 1, 2018, requiring approval from the IT organization before taking action to develop or procure IT, and reiterating the process for requesting and procuring IT products and services. The IRS IT organization is already working with the Office of Procurement to implement controls for IT acquisitions supported through this memorandum.

The attached corrective actions describe how the IRS plans to implement the audit report's recommendations. The IRS values the continued support and assistance TIGTA provides. If you have any questions, please contact me at (202) 317-5000 or Carmelita White, Senior Manager of Program Oversight Coordination, at (240) 613-2191.

Attachment



Draft Audit Report- Information Technology Investment Management Controls Should Be Better Aligned With the Federal Information Technology Acquisition Reform Act of 2014 (audit # 201720014)

The Chief Information Officer should:

**RECOMMENDATION 1:** Comply with the Treasury Department's FITARA guidance, which delegates to the IRS CIO responsibility for reviewing the acquisition and contract sections in IRS business cases.

<u>CORRECTIVE ACTION 1:</u> We agree with this recommendation. We will establish a process to comply with the Treasury Department's FITARA assignment guidance.

**IMPLEMENTATION DATE:** March 15, 2019

<u>RESPONSIBLE ORGANIZATION</u>: Associate Chief Information Officer, Strategy and Planning

<u>CORRECTIVE ACTION MONITORING PLAN</u>: We enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES) and monitor them monthly until completion.

**RECOMMENDATION 2.** Establish processes to identify, review, and approve information technology acquisitions supporting major information technology investments enterprise-wide regardless of origination or funding source

<u>CORRECTIVE ACTION 2</u>: We agree with this recommendation. We will develop a process that implements the May 1, 2018 Deputy Commissioner Operations Support and the Deputy Commissioner Services and Enforcement memorandum, Information Technology (IT) Products and Services. The purpose of the memorandum is to remind IRS organizations to obtain approval from the IT organization before taking action to develop or procure IT.

**IMPLEMENTATION DATE:** February 15, 2019

<u>RESPONSIBLE ORGANIZATION</u>: Associate Chief Information Officer, Strategy and Planning

<u>CORRECTIVE ACTION MONITORING PLAN</u>: We enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES) and monitor them monthly until completion.



Draft Audit Report – - Information Technology Investment Management Controls Should Be Better Aligned With the Federal Information Technology Acquisition Reform Act of 2014 (audit # 201720014)

**RECOMMENDATION 3:** Report lessons learned trends to the heads of IT organizations and governance bodies for consideration in recommending and overseeing changes to project management processes

CORRECTIVE ACTION 3. We agree with this recommendation. Beginning in FY 2019, the Lessons Learned Team will develop and provide periodic Lessons Learned Analysis Reports (successes and shortfalls) to Program Management Offices and governance boards for use in recommending and overseeing project management processes.

**IMPLEMENTATION DATE:** April 15, 2019

**RESPONSIBLE ORGANIZATION:** Associate Chief Information Officer, Strategy and Planning

<u>CORRECTIVE ACTION MONITORING PLAN</u>: We enter accepted Corrective Actions into the Joint Audit Management Enterprise System (JAMES) and monitor them monthly until completion.