TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



The Enterprise Case Management Solution Deployment Is Delayed, and Additional Actions Are Needed to Develop a Decommissioning Strategy

September 21, 2020

Reference Number: 2020-20-061

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Final Audit Report issued on September 21, 2020 Reference Number 2020-20-061



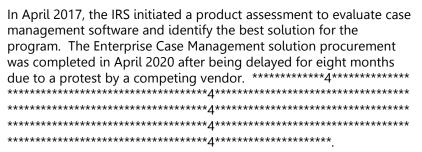
Why TIGTA Did This Audit

This audit was initiated to review IRS efforts to implement an Enterprise Case Management solution. The IRS previously spent \$85.4 million and approximately two and one-half years of work to develop a case management system that was unsuccessful. The IRS has refocused its efforts and made a new investment to address the need to modernize, upgrade, and consolidate its many current case management systems.

Impact on Taxpayers

Tax administration is supported by more than 60 different case management systems that vary widely in complexity, size, and customization. These case management systems were implemented over many years to support the individual needs of multiple business units. As a result, the IRS is maintaining various Commercial-Off-the-Shelf products that use different hardware and software. These systems provide limited visibility into case management practices between programs and introduce redundancies, bottlenecks, and increased risk. The Enterprise Case Management solution is designed to streamline case and workload management and improve resource alignment, resulting in integrated information technology programs that enable improved service to the taxpayer.

What TIGTA Found



The overall IRS legacy systems decommissioning strategy is not clearly defined, but the Enterprise Case Management program developed a sequencing tool that will help identify and analyze the existing case management processes in order to consolidate and implement these processes into the new solution. The IRS has started to work on an overall legacy system decommissioning strategy.

The IRS reported that it completed its planned corrective actions to address previous TIGTA recommendations, but did not provide complete documentation to support whether the solution will consolidate a majority of the legacy case management systems. The IRS started work on a fit-gap analysis that will identify which business requirements can be met by the new solution and where gaps may exist.

What TIGTA Recommended

The Chief Procurement Officer should develop guidance for the disclosure of sensitive procurement information. In addition, the Deputy Commissioner for Operations Support and the Deputy Commissioner for Services and Enforcement should develop a legacy case management capability and process decommissioning strategy that informs the Enterprise Case Management solution's sequencing and enables the Information Technology organization to execute decommissioning system activities in a timely manner, and coordinate with the business operating divisions to perform the fit-gap analysis on all case management systems to maximize the solution's functionality and ensure that the majority of legacy case management systems are consolidated.

The IRS agreed with all three of our recommendations. The IRS plans to develop guidance on employees' disclosure of sensitive procurement information, complete a decommissioning strategy and seek approval for the strategy from the relevant steering committee and governance bodies, and conduct a two-part fit-gap analysis by identifying potential gaps in business functionality and cataloging the high-level capabilities of the more than 60 major legacy case management systems to assess the potential for consolidation and/or retirement.



U.S. DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20220

September 21, 2020

MEMORANDUM FOR: COMMISSIONER OF INTERNAL REVENUE

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FROM: Michael E. McKenney

Deputy Inspector General for Audit

SUBJECT: Final Audit Report - The Enterprise Case Management Solution

Deployment Is Delayed, and Additional Actions Are Needed to Develop a Decommissioning Strategy (Audit # 202020017)

This report presents the results of our review of the Internal Revenue Service efforts to implement an Enterprise Case Management solution. This review is part of our Fiscal Year 2020 Annual Audit Plan and addresses the major management and performance challenge of *Modernizing IRS Operations*.

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

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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Background

Tax administration in the Internal Revenue Service (IRS) is supported by more than 60 different case management systems that vary widely in complexity, size, and customization. The IRS implemented these case management systems over many years to support the individual needs of multiple business units. As a result, the IRS is maintaining various Commercial-Off-the-Shelf (COTS) products¹ that use different hardware and software. These systems provide limited visibility into case management practices between programs and introduce redundancies, bottlenecks, and increased risk. In January 2015, the IRS formally established the Enterprise Case Management (ECM) program to consolidate case management systems across the IRS. The ECM program planned to:

- Standardize system design for increased taxpayer information security.
- Reduce the risk for system failures that would impede revenue collection.
- Provide cost savings by reducing information technology hardware, software, and system maintenance costs.

In that effort, the ECM program planned to use technology from the Affordable Care Act Case Management Project because its system development began prior to the establishment of the ECM program. The IRS chose to use a tool for its ECM solution despite problems reported from prior case management projects. Specifically, the tool had not proven it could be scalable to the IRS's needs and did not have a capability for continuous integration. In November 2016, the IRS issued to the tool's vendor a list of 37 operational software problems. In addition to the software problems within the tool itself, the ECM requirements were not agreed upon prior to the start of the ECM project.

In July 2018, we reported that the IRS suspended the previous ECM project's development activities in April 2017 following notification to the IRS Commissioner that the tool was not a viable solution.² The IRS spent \$85.4 million and approximately two and one-half years to develop a case management system that was unsuccessful. We recommended that the Chief Information Officer ensure that:

- An ECM solution is selected that will enable the IRS to consolidate the majority of the legacy case management systems.
- The base and mission-critical ECM program requirements are determined and all initial planning and program-level activities are completed prior to the technical solution procurement and the start of ECM projects.

Following this unsuccessful development work, in April 2017, the IRS refocused its efforts and established the ECM Executive Steering Committee to govern the ECM program and its projects. The ECM Executive Steering Committee provides enterprise integration for all ECM program activities and projects. The primary objectives of the committee are to ensure that program and project objectives are well designed and met, risks are identified and managed appropriately

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¹ See Appendix III for a glossary of terms.

² Treasury Inspector General for Tax Administration, Ref. No. 2018-20-043, *Initial Efforts to Develop an Enterprise Case Management Solution Were Unsuccessful; Other Options Are Now Being Evaluated* (July 2018).



across the enterprise, and enterprise resources are aligned with program needs. In May 2019, the IRS Commissioner created the role of Director, ECM, to serve as the program's accountable official and to oversee the ECM program for the business operating divisions and the Information Technology organization.

The IRS envisioned that a new ECM investment would address the need to modernize, upgrade, and consolidate its many case management systems. This new ECM program is designed to provide an enterprise solution for performing case management functions utilizing a Department of the Treasury Cloud platform, thus reducing long-term costs and increasing operational efficiency, innovation, and security. The ECM program is a primary objective of the IRS Integrated Modernization Business Plan³ and part of the Taxpayer First Act.⁴ The ECM case management functions will be developed as common services for multiple systems to share. The updated ECM program's objectives are to:

- Administer tax law to better enable all taxpayers to meet their obligations, while protecting the integrity of the tax system.
- Increase the access and use of Federal financial data to strengthen Governmentwide decisionmaking, transparency, and accountability.
- Improve Federal financial management performance using innovative practices to support effective Government.

In April 2017, the IRS initiated a COTS Product Assessment to evaluate the industry's case management software and identify the best solution for the ECM program. A COTS Product Assessment uses three stages in order to procure software or a platform. These stages include defining the ECM goals and structure, refining the requirements, and procuring a solution. The COTS Product Assessment is completed by the issuance of an award. The IRS stated it developed this procurement strategy to ensure that the IRS would have confidence in the viability of the selected vendor proposal and mitigate an issue from previous development work. From April 2017 to April 2020, the IRS worked through these stages to procure a solution that would satisfy ECM requirements. The ECM solution is designed to streamline case and workload management and improve resource alignment, resulting in integrated information technology programs that enable improved service to the taxpayer. Figure 1 summarizes the timeline of this procurement process based upon ECM project documentation.

Figure 1: Timeline of IRS ECM Procurement Activities

| Date | Activity Performed |
|-------------|---|
| April 2017 | The ECM program began work using an acquisitions strategy to solicit a solution award by reviewing initial requirements and drafting a Request for Information. |
| May 2017 | The ECM program issued a Request for Information and began to receive vendor responses. |
| August 2017 | Following the responses from the first Request for Information, the ECM program issued a second Request for Information. |

³ IRS Integrated Modernization Business Plan (Apr. 2019).

⁴ Pub. L. No. 116-25, 133 Stat. 981.



| Date | Activity Performed |
|----------------|--|
| December 2017 | The ECM program set a planned completion date to issue a solution award in February 2019. |
| January 2018 | The ECM program issued a draft Request for Quotation (RFQ) based on responses from the previous Requests for Information. |
| May 2018 | ECM program delays pushed back the solution award's planned completion date to April 2019. The ECM program narrowed its list of possible vendors and issued a RFQ. |
| September 2018 | From the RFQ, the ECM program selected two potential solutions and awarded blanket purchase agreements. |
| November 2018 | The ECM program initiated the ECM Physical Assessment and Analysis hands-on evaluation of the two potential solutions. |
| December 2018 | ECM program delays again pushed back the solution award's planned completion date to May 2019. |
| January 2019 | Following the end of the partial Government shutdown on January 25, 2019,5 which stopped all work on the ECM, the ECM program conducted a schedule review and developed an updated schedule to ensure that the program could complete all award activities in Fiscal Year 2019. The planned solution award completion date was pushed back to August 2019. |
| August 2019 | The solution award selection was made. A competing vendor immediately protested the award. The IRS decided to address the protest through a corrective action. The ECM program revised its RFQ to more accurately state its requirements. |
| March 2020 | The Government Accountability Office dismissed the protest following a review of the IRS's corrective actions. |
| April 2020 | The IRS successfully completed the ECM solution award. |
| September 2020 | Planned partial deployment of Release 1.0. |
| December 2020 | Planned full deployment of Release 1.0. |

Source: ECM Status Report documentation.

| Following the initial selection for the solution award in August 2019, a competing vendor |
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| immediately protested the award decision. Any interested party, but typically the losing vendor |
| may file a protest if they feel a Government contract has violated procurement law or |
| regulation. ************************************ |
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⁵ The partial Government shutdown lasted 35 days from December 22, 2018, to January 25, 2019.



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| ********4***4****4**************. The second solution award was made on April 2, 2020, with a |
| total value of more than \$45 million. The second solution award was not protested by a |
| competing vendor. As of May 2020, development activities were underway and the ECM |
| program plans for a full deployment of Release 1.0 by the end of Calendar Year 2020. |

Results of Review

The Procurement Process Delayed Deployment of Release 1.0

ECM program management stated that the unsuccessful development work terminated in April 2017 pushed them to thoroughly identify the ECM business requirements needed for the ECM solution award. In April 2017, the IRS decided to use an in-depth COTS Product Assessment to ensure a successful procurement. OCPO employees stated this phased approach for procuring software was new to the IRS, so the IRS contracted with the MITRE Corporation for assistance in gathering project requirements. Phase one started by conducting market research on case management solutions from private industry and five Federal agencies. The ECM program then completed two Requests for Information and a draft RFQ. After issuing a final RFQ in May 2018, the IRS completed product demonstrations and received proposals from eight vendors.

The OCPO stated that phase two started in September 2018, when the IRS selected two vendors and issued two Blanket Purchase Agreements to procure the vendors' software to conduct technical evaluations. OCPO officials and ECM stakeholders stated that issuing Blanket Purchase Agreements to evaluate software had never been performed before at the IRS. Each task order under the Blanket Purchase Agreements cost the IRS approximately \$500,000. IRS officials stated that this enabled the IRS to validate vendor capabilities and allowed the IRS insight into the vendor solution. IRS officials stated that this process was beneficial in finding a solution that met the ECM program's needs.

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During the lessons learned process, the ECM Physical Assessment and Analysis test team identified gaps in communication and received inconsistent information between the vendor and the OCPO. These issues resulted in the misunderstanding of requirements during the ECM Physical Assessment and Analysis process of evaluating vendor software and could have mitigated some of the risks raised in the protest. ECM program management stated that the requirement discrepancy that led to the protest occurred because key personnel were not privy to the required procurement information. ECM program management stated that for a large-scale information technology procurement, the level of detail is magnified and requires all parties to be in agreement during the various stages of development and procurement. During the protest, ECM program management discussed the procurement sensitivity issues with the OCPO. After the discussion, ECM program management stated that key decision makers and approving officials were provided with proper procurement sensitive information and a more collaborative process occurred. The IRS completed its corrective action and successfully procured the solution on April 2, 2020. The lack of proper detail in the RFQ and the corresponding IRS decision to undertake a corrective action contributed to an eight-month delay in receiving the ECM solution. By identifying development activities that the ECM program could still work on during this delay, the IRS only pushed back its scheduled deployment date of Release 1.0 by approximately three months. As planned, the IRS allocated \$6.2 million in Fiscal Year 2019 and more than \$36 million in Fiscal Year 2020 to develop and deliver ECM Release 1.0.

Recommendation 1: The Chief Procurement Officer should develop guidance for the disclosure of sensitive procurement information to stakeholders with a need to know.

Management's Response: The IRS agreed with this recommendation. The Chief Procurement Officer will develop guidance, based on the Procurement Integrity Act (41 United States Code Section 423), as implemented through the Federal Acquisition Regulation and its impact on employees' disclosure of sensitive procurement information.

The Legacy Case Management Decommissioning Strategy Is Not Fully Developed

The *IRS Integrated Modernization Business Plan* states that the IRS will focus on developing standardized, agile solutions that leverage emerging technologies, while decommissioning and replacing legacy systems. Three basic objectives will help the IRS achieve a leaner, nimbler capability portfolio while keeping operational costs controlled:

• Reduce the complexity of the technical environment.



- Leverage data to deliver secure, agile, and efficient applications and services.
- Strengthen organizational agility through automation and streamlining processes.

The General Services Administration established guidance that directs agencies to develop a decommission plan. The decommission plan should involve key stakeholders to ensure a coherent strategy for retiring legacy systems. In addition, Federal cloud guidance⁷ states that migration to the cloud may require the decommissioning of legacy systems that have been in use for many years, as is the case with the ECM. Agencies can ease workforce concerns by clearly articulating how the current workforce will align once cloud adoption is complete. This guidance recommends socializing a technology roadmap to include systems that will be migrating to the cloud, either completely or partially, and an outline of the change management process to include reskilling opportunities.

The IRS does not have a clear and comprehensive overall strategy for decommissioning legacy systems.⁸ However, the ECM program developed a sequencing tool that will help identify and analyze the existing case management processes in legacy systems in order to consolidate and implement these processes into the new ECM solution. The ECM program plans to include legacy systems as a factor in the sequencing decisionmaking process. The failure to establish an effective ECM decommissioning strategy could lead to a lack of coordinated technology investments to replace existing legacy case management systems in a cost-effective and efficient manner, and disrupt business processes and taxpayer service as legacy case management systems are migrated to the ECM solution.

Recommendation 2: The Deputy Commissioner for Operations Support and the Deputy Commissioner for Services and Enforcement should develop a legacy case management capability and process decommissioning strategy that informs the ECM solution's sequencing and enables the Information Technology organization to execute decommissioning system activities in a timely manner.

Management's Response: The IRS agreed with this recommendation. The IRS will complete a decommissioning strategy and seek approval for the strategy from the Commissioner's ECM Executive Steering Committee and any relevant subordinate governance bodies.

One Planned Corrective Action Was Not Fully Completed

In our July 2018 ECM report, we recommended that the Chief Information Officer ensure that:

- The solution will enable the IRS to consolidate the majority of the legacy case management systems.
- Base and mission-critical ECM program requirements are determined and program-level activities are completed prior to the technical solution procurement.

⁶ General Services Administration, *Modernization and Migration Management (M3) Playbook* (Sept. 2018).

⁷ Office of Management and Budget, From Cloud First to Cloud Smart (Mar. 2017).

⁸ This issue was reported in Treasury Inspector General for Tax Administration, Ref. No. 2020-20-044, *Legacy Systems* Management Needs Improvement (Aug. 2020).



The IRS indicated that it had completed Planned Corrective Actions (PCA), such as completing a product assessment and identifying an ECM solution. However, we found that the information provided by the IRS did not fully support closing the PCA regarding the consolidation of the majority of legacy case management systems. Actions taken regarding the identification of all base and mission-critical ECM program requirements met the intent of our recommendation. According to the Joint Audit Management Enterprise System Guidance, the PCA review process is not simple and can be subjective. While some aspects of the PCA supporting documentation are straight forward, each individual's interpretation of sufficient documentation may vary from person-to-person depending on his or her background and perspective. PCA supporting documentation should be evaluated for its sufficiency, relevance, validity, and reliability.

Consolidate the majority of the legacy case management systems

The IRS stated that the PCA for the recommendation to consolidate the majority of the legacy case management systems was implemented and closed as of August 8, 2019. However, our analysis determined that the completion of the PCA is not fully supported in the Joint Audit Management Enterprise System. We found that the IRS included only minimal details related to the solution's ability to consolidate the majority of legacy case management systems. The documentation identified for closure was not supported by detailed technical documentation to adequately support the solution's ability to consolidate the majority of case management systems. ECM program management stated that access to the ECM product should enable the IRS to conduct a thorough analysis.

We reviewed General Services Administration guidance that segments modernization and migration programs into six discrete phases. Within each phase, there are associated activities. We evaluated ECM program activities against each of these phases to determine if the ECM solution will enable the IRS to consolidate the majority of its legacy case management systems.

Assessment Phase - Completed

The objective of the assessment phase is to fulfill the requirement of submitting capital planning investments though the Capital Planning and Investment Control process. This phase includes two activities, defining a vision and developing a business case. During our review, we found that the IRS developed an ECM business case and defined a vision statement, which is to be a progressive and agile ECM solutions facilitator for our customers.

Readiness Phase - Completed

The objective of the readiness phase is to prepare the migrating organization by defining an initial scope of services and customer governance for the modernization effort. The guidance recommends establishing the necessary ECM program structure and developing the Program Charter. During our review, we found an ECM Governance Charter, as well as an ECM Program Charter. In addition, the guidance suggests defining benefits of the program. This activity establishes a clear, quantifiable set of measures that can be used to monitor progress and track the achievement of the program's stated goals and objectives.

Selection Phase - Completed

The objective of the selection phase is to conduct due diligence by selecting a provider based on the requirements and the initial target end state. The selection phase includes an

⁹ Joint Audit Management Enterprise System, Office of Audit Coordination: JAMES Analyst Desk Guide, (Aug. 2019).



implementation approach and schedule activity. This activity details the high-level plan for, and integration activities required for, deploying systems and services within the customer organization. In April 2020, the IRS completed the ECM solution award. In addition, we found the IRS has an approved ECM release plan.

Engagement Phase – In Process

The objective of the engagement phase is to conduct detailed planning through a fit-gap analysis and finalize the implementation roadmap. The engagement phase provides the information necessary to formally establish and initiate the engagement process between the customer and provider. We identified multiple completed activities in this area, such as governance charters, a procurement plan, status reports, lessons learned, and a risk and issues log. The guidance states an organization could perform a requirements fit-gap analysis during the engagement phase. The fit-gap analysis results in a report that identifies where requirements can be met by the provider's standard solution and where gaps may exist. ECM program management started work on a fit-gap analysis and met with the solution vendor in May and June 2020 to identify gaps.

Migration Phase - Just Started

The objective of the migration phase is to build, test, and deploy the new system, concept of operations, and workforce design. The guidance suggests including all migration activities and responsible parties in the Integrated Master Schedule and developing relevant metrics in order to monitor the provider's performance. We found that the decommissioning strategy for the ECM program is in development, and performance metrics have not been developed. In May 2020, the ECM program chartered the Case Management Demand Advisory Board to evaluate case management demand for legacy systems and make recommendations for addressing critical business needs. The ECM program plans to deliver a Decommissioning Roadmap in Fiscal Year 2021.

Operations Phase - Not Started

The objective of the operations phase is to deliver services and conduct continuous process improvement. The guidance includes activities such as measuring performance against expected benefits, collecting lessons learned, implementing operations and maintenance governance, maintaining applications after implementation, and retiring legacy systems including hardware, software, licenses, and interfaces.

To support the operations success of the technical solution's ability to consolidate legacy case management systems, General Services Administration guidance also recommends to:

- 1. Communicate the value and benefits of migration and business process changes.
- 2. Identify any solution gaps.
- 3. Identify a potential list of legacy systems eligible for decommissioning.
- 4. Establish goals and milestones to reduce the number of legacy systems.

The ECM program is still in progress, and not all phases of the migration program are complete. We found incomplete details in the ECM technical solution documentation and could not determine whether the solution will consolidate a majority of the legacy case management systems. Missing or incomplete details regarding solution capabilities and performance create risks to achieving the IRS's case management consolidation vision. In addition, the ECM



Technical Evaluation Plan¹⁰ requires review and approval of program activities at the Senior Executive level. While the requirements in the RFQ were reviewed at the Senior Executive Level, there was no review of detailed program activities, such as the business and technical requirements listed in the Technical Evaluation Plan by the ECM Executive Steering Committee, ECM Governance Board, or business or other stakeholder organizations. The Contracting Officer reviewed and approved the ECM Technical Evaluation Plan prior to the completion of the ECM Physical Assessment and Analysis.

Mission-critical program requirements

We also reviewed base and mission-critical ECM program requirements to determine whether they were identified in initial planning and whether program-level activities were completed prior to the technical solution procurement. We reviewed the following information uploaded in the Joint Audit Management Enterprise System and all five of the IRS's supporting activities:

- The January 2018 Draft ECM COTS Product Assessment detailing the comprehensive IRS partner engagement through multiple working sessions to identify the base and mission-critical requirements.
- The ECM program's Draft RFQ dated January 20, 2018, begins to identify requirements for the ECM solution.
- The ECM program's RFQ dated May 24, 2018, outlines the 17 Minimum Mandatory Requirements and the more than 300 technical and business requirements.
- The IRS Commissioner's ECM Executive Steering Committee Materials dated July 18, 2019, discusses the ECM's long-term strategy.
- The ECM Governance Board meeting minutes dated August 8, 2019, document the virtual vote on July 23, 2019, recommending approval of the Release 1.0 Plan.

We determined that all five activities directly relate to aspects of the identification of base and mission-critical requirements and meet the intent of our recommendation.

According to the General Services Administration's best practices for reducing risk during service modernizations and migrations, agencies should:

- 1. Perform a fit-gap analysis.
- 2. Identify the business processes that are not suitable for the new technical solution.

Performing these activities would provide additional support to show that base and mission-critical program requirements were identified. During our audit, the ECM program developed a Data Collection Instrument that is being completed by the business operating divisions to inventory business processes and map them to data and functionality needs. These activities could ultimately improve efforts to ensure the identification of all base and mission-critical requirements in order to decommission legacy case management systems.

<u>Recommendation 3</u>: The Deputy Commissioner for Operations Support and the Deputy Commissioner for Services and Enforcement should coordinate with the business operating divisions to perform the fit-gap analysis on all case management systems to maximize the ECM

¹⁰ IRS Enterprise Case Management Technical Evaluation Plan (Sept. 2018).



solution's functionality and ensure that the majority of legacy case management systems are consolidated.

Management's Response: The IRS agreed with this recommendation. The IRS will conduct a two-part fit-gap analysis. The IRS will identify potential gaps in business functionality by comparing the capabilities of the selected ECM COTS solution to the Statement of Objectives included in the solution RFQ. The IRS will also catalogue the high-level capabilities of each of the more than 60 major legacy case management systems to assess the potential for consolidation or retirement based on the ECM sequencing roadmap, subject to resources availability.



Appendix I

Detailed Objective, Scope, and Methodology

Our overall objective was to review IRS efforts to implement an ECM solution. To accomplish our objective, we:

- Assessed whether the IRS effectively addressed our previous report recommendations
 through corrective actions by analyzing the criteria for completing PCAs, reviewing
 documentation and interviewing ECM program management on the work performed to
 complete the PCAs, and evaluating the work performed against the previous report
 recommendations.
- Evaluated whether the IRS followed proper policies and procedures when soliciting the ECM program's solution by reviewing award documentation and relevant criteria for procuring a solution, and interviewing ECM program management and procurement officials to identify reasons for the solution award protest.
- Evaluated whether the IRS effectively and efficiently developed the ECM program by obtaining and reviewing ECM status reports, reviewing the IRS strategy, and determining whether legacy systems are evaluated when making migration decisions.

Performance of This Review

This review was performed at the Treasury Inspector General for Tax Administration's offices in Atlanta, Georgia; New Carrollton, Maryland; and Philadelphia, Pennsylvania, with information obtained from the ECM program and the OCPO during the period November 2019 to June 2020. 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.

Major contributors to the report were Danny Verneuille, Assistant Inspector General for Audit (Security and Information Technology Services); Jena Whitley, Director; Myron Gulley, Audit Manager; Jason McKnight, Audit Manager; Kasey Koontz, Lead Auditor; Charlene Elliston, Senior Auditor; Benedict Kim, Senior Auditor, and Danielle Synnestvedt, Auditor.

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: ECM program requirements and planning documentation, Federal regulations and agency guidance, and the OCPO's policies and procedures related to the development of solution requirements and the award process. We evaluated these controls by interviewing IRS management and employees involved in the



ECM program, as well as reviewing program status reports and conducting documentation analysis.



Appendix II

Management's Response to the Draft Report



DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE WASHINGTON, DC 20224

September 10, 2020

MEMORANDUM FOR THE DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Justin Abold-LaBreche

Justin L. Abold-LAbold-Labreche
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LaBreche
Digitally signed by Justin
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Date: 2020.9.10 16:12:26

Co-Director, Enterprise Digitalization and Case Management LaBreche

SUBJECT: Response to Draft Audit Report – 2020-20-017, Enterprise Case

Management

ECM will Provide Top Quality Service to Taxpayers and Empower Employees

Enterprise Case Management (ECM) is a major component of our IRS Integrated Modernization Business Plan and a key enabler for the implementation of long-term changes stemming from the Taxpayer First Act. ECM is intended to modernize and standardize enterprise-wide case management processes and systems to provide top quality service to taxpayers. ECM will empower employees to rapidly resolve cases in a simplified technical environment, driving efficiency and collaboration, resulting in a more empowering experience for taxpayers and employees alike.

ECM is a major business and IT transformation effort and it is critical that we have rigorous independent reviews of our program to help identify where we have utilized best practices and, as importantly, where we have opportunities to improve. For these reasons, we are thankful for the rigorous audit TIGTA conducted at this stage of our efforts. Based on our review of the audit report, we assess ECM is on very solid footing and well positioned for continued success – we appreciate all three recommendations and believe that implementing them will further strengthen our efforts.

Innovative Procurement Resulted in Best in Class Solution

The IRS used an innovative challenge-based acquisition to procure an industry leading Commercial-Off-the-Shelf (COTS) platform for ECM. This innovative approach – a first of its kind in the IRS – ensured that vendors were not only assessed on their written proposals but also hands on, where our IRS technical experts could validate the performance of the finalists. As a result of this exacting procurement approach, we are extraordinarily confident that our selection of PegaSystems has resulted in a solution that will not only meet but exceed our requirements. From a requirements solicitation that engaged almost every operating division across the IRS through to final award, we view this procurement as a model for many best practices in highly complex



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acquisitions. While our internal assessment of the vendor protests differs from TIGTA's, we agree that guidance for the disclosure of sensitive procurement information to stakeholders with a need to know can only serve to strengthen the IRS's ability to make sound risk-based decisions during a procurement.

Decommissioning Already a Key Factor in Our Approach to ECM

One of the major opportunities we are creating with ECM is the potential to decommission legacy case management components and systems. The IRS has embedded this opportunity into the way we are approaching ECM overall - we have already developed a draft decommissioning strategy that ensures we plan for decommissioning from the start of each effort to modernize and migrate business processes onto ECM along with their needed data, capabilities and technology enablers. In this way we are as proactive as possible in working toward decommissioning as well as dispositioning elements that cannot be decommissioned. As TIGTA's audit noted, we are already using decommissioning as a factor in our decision making for the sequence in which we modernize and migrate business processes onto the platform, with the aim of pulling decommissioning opportunities forward whenever possible. We also have an executive advisory board in place to help ensure we make appropriate, limited investments in legacy case management systems during this transition phase. We will continue to develop and complete a decommissioning strategy; this work is well underway, and we are already acting on many of the critical elements while we finalize our strategy.

Product Roadmap Well Underway

One of the critical next steps in ECM is to develop a multi-year product roadmap, which will guide the order in which we stand up the platform's data, capabilities and technology enablers, as well as modernize and migrate the business processes onto the platform. We are well underway in its development. As part of developing this roadmap, as TIGTA notes in its report, we are working closely with all our operating divisions to identify which business processes they have prioritized for migration into ECM along with their associated data, capabilities, and technology enablers. We are currently analyzing all the responses and will use that - together with the requirements we solicited prior to the procurement - to complete our on-going fit gap analysis, which will help identify whether there are any business processes that may not be strong candidates to migrate into ECM and why. This fit gap analysis will in turn serve as input for our decommissioning planning if it indicates there may be legacy case management systems whose business processes may not migrate into ECM. While we differ from TIGTA's assessment about the completion of the Planned Corrective Action from the prior ECM audit, which we view as having been appropriately closed, we will complete a fit gap analysis. All of the component parts of this effort are currently underway.



3

ECM will Deliver Value this Year and Scale Up for Substantial Additional Value Next Year

As TIGTA's audit recognizes, ECM is positioned to deliver value starting this year with TE/GE Exempt Organizations Customer Support. This business process – which serves to address taxpayer inquiries about exempt organizations – has undergone full modernization, bringing it from a highly manual, paper driven process to one that is digitally enabled from start to finish. We expect the taxpayer experience will be enhanced by these changes and employees will have the tools they need to address incoming inquiries in one place – ECM – instead of needing to log in to multiple systems. Despite delays resulting from protests during the procurement process, ECM is on track to maintain our initial releases in September and December. With this strong foundation, we are already looking ahead to scale up our approach and modernize and migrate several more business processes onto ECM along with their required data, capabilities and technology enablers throughout Calendar Year 2021.

Earlier this year, the IRS requested TIGTA include ECM annually in its planned audits. We would like to reiterate that request. As a major IRS initiative, we are committed to ensuring ECM is best in class – and one of those best in class features is a regular independent review. To the extent TIGTA has the resources to incorporate ECM annually, we feel that will strengthen our efforts.

The IRS values your continued support and the assistance your organization provides. If you have any questions, please contact me at (202) 231-0979.



4

Planned Corrective Actions

RECOMMENDATION #1: The Chief Procurement Officer should develop guidance for the disclosure of sensitive procurement information to stakeholders with a need to know.

CORRECTIVE ACTION #1: The Chief Procurement Officer will develop guidance, based on the Procurement Integrity Act (41 U.S.C. §423), as implemented through the Federal Acquisition Regulation (FAR), and its impact on IRS employees' disclosure of sensitive procurement information by March 31, 2021.

IMPLEMENTATION DATE: March 31, 2021

RESPONSIBLE OFFICIALS: Chief Procurement Officer

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

RECOMMENDATION #2: The Deputy Commissioner for Operations Support and the Deputy Commissioner for Services and Enforcement should develop a legacy case management capability and process decommissioning strategy that informs the ECM solution's sequencing and enables the Information Technology organization to execute decommissioning system activities in a timely manner.

CORRECTIVE ACTION #2: As TIGTA's audit noted, we are already using decommissioning as a factor in our decision making for the sequence in which we modernize and migrate business processes onto the platform. The IRS will complete a decommissioning strategy and seek approval for the strategy from the Commissioner's ECM Executive Steering Committee and any relevant subordinate governance bodies.

IMPLEMENTATION DATE: September 15, 2021

RESPONSIBLE OFFICIALS: Co-Director, Enterprise Digitalization and Case Management Office, DCSE/DCOS

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

RECOMMENDATION #3: The Deputy Commissioner for Operations Support and the Deputy Commissioner for Services and Enforcement should coordinate with the Business Operating Divisions to perform the fit-gap analysis on all case management systems to maximize the ECM solution's functionality and ensure that the majority of legacy case management systems are consolidated.



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CORRECTIVE ACTION #3: The IRS will conduct a two-part fit-gap analysis. The IRS will identify potential gaps in business functionality by comparing the capabilities of the selected ECM COTS solution to the Statement of Objectives (SOO) the IRS included in the solution Request for Quotation (RFQ). The IRS will also catalogue the high-level capabilities of each of the 60+ major legacy case management systems to assess the potential for consolidation and/or retirement based on the ECM sequencing roadmap, subject to resources availability.

IMPLEMENTATION DATE: September 15, 2021 (fit-gap analysis)
IMPLEMENTATION DATE: September 15, 2023 (catalogue completion)

RESPONSIBLE OFFICIALS: Co-Director, Enterprise Digitalization and Case Management Office, DCSE/DCOS

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



Appendix III

Glossary of Terms

| Term | Definition |
|---|---|
| Affordable Care Act ¹ | The comprehensive health care reform law enacted in March 2010 and subsequently amended. The law was enacted in two parts. The Patient Protection and Affordable Care Act was signed into law on March 23, 2010, and was amended by the Health Care and Education Reconciliation Act on March 30, 2010. The Affordable Care Act refers to the final amended version of the law. |
| Blanket Purchase Agreement | An option for Federal agencies and schedule contractors alike, providing convenience, efficiency, and reduced costs. Contractual terms and conditions are contained in General Services Administration Schedule contracts and are not to be renegotiated for Blanket Purchase Agreements. Therefore, as a purchasing option, Blanket Purchase Agreements eliminate such contracting and open market costs as the search for sources, the need to prepare solicitations, and the requirement to synopsize the acquisition. |
| Case Management | The process that addresses the resolution of tax administration issues through the management of case creation, execution, maintenance, and closure. |
| Cloud | A computing model for enabling on-demand network access to a shared pool of configurable information technology capabilities and resources, <i>e.g.</i> , networks, servers, storage, applications, and services, that can be rapidly provisioned and released with minimal management effort or service provider interaction. It allows users to access technology-based services from the network cloud without knowledge of, expertise with, or control over the technology infrastructure that supports them. |
| Commercial-Off-the-Shelf | Prepackaged, vendor-supplied software that will be used with little or no modification to provide all or part of the solution. |
| Decommissioning | A process to review what business processes remain on legacy systems and identify opportunities to accelerate system retirement. |
| Enterprise Case Management Physical Assessment and Analysis | A set of activities designed to evaluate vendors' solutions and provide the level of confidence that the selected solution will be viable for the IRS. Activities are designed to ensure that the solution meets selected technical and business objectives of the ECM program. |
| Executive Steering Committee | A committee that oversees investments, including validating major investment business requirements and ensuring that enabling technologies are defined, developed, and implemented. |

¹ Pub. L. No. 111-148, 124 Stat. 119 (2010) (codified as amended in scattered sections of the U.S. Code), as amended by the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029.



| Governance Board | Exists to ensure that the program goals are achieved and that the program and component projects are delivering within their defined scope, schedule, and budget. In addition, the Governance Board approves risk response plans and milestone exits and resolves escalated issues. |
|---|---|
| Integrated Master Schedule | Provides a schedule for project development and integration of all modernization projects. |
| Joint Audit Management Enterprise System | A system used to document and track the status of recommendations from audit reports and their corresponding corrective actions. |
| Legacy System | An information system that may be based on outdated technologies but is critical to day-to-day operations. In the context of computing, it refers to outdated computer systems, programming languages, or application software that are used instead of more modern alternatives. |
| Planned Corrective Action | A process to address IRS material weaknesses, significant deficiencies, and existing reportable conditions through remediation and action plans. |
| Release | A collection of changes made since the last deployment of a system. A release can also refer to an initial deployment of software or hardware. |
| Requirement | A formalization of a need and the statement of a capability or condition that a system, subsystem, or system component must have or meet to satisfy a contract, standard, or specification. |
| Sequencing | A process of evaluating scalability, business impact, capabilities, and processes to determine the order for migrating systems. |



Appendix IV

Abbreviations

| COTS | Commercial-Off-the-Shelf |
|------|---|
| ECM | Enterprise Case Management |
| IRS | Internal Revenue Service |
| ОСРО | Office of the Chief Procurement Officer |
| PCA | Planned Corrective Action |
| RFQ | Request for Quotation |