

TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



The Individual Tax Processing Engine Project Is Progressing, but Risks Remain

September 16, 2024

Report Number: 2024-208-052

Why TIGTA Did This Audit

The Customer Account Data Engine 2 program is one of the most complex modernization programs in the Federal Government and involves major changes to core IRS tax processing systems. The Customer Account Data Engine 2 program plans to reengineer the Individual Master File from an old programming language into a modern language.

This audit was initiated to determine whether the IRS effectively managed the testing and defect remediation process for the Individual Tax Processing Engine (ITPE) project and whether a delay in implementing the ITPE project would affect the schedule of any Inflation Reduction Act projects or milestones.

Impact on Tax Administration

The Customer Account Data Engine 2 program is intended to provide state-of-the-art individual taxpayer account processing as well as data-centric technologies to improve service to taxpayers.

The IRS established the ITPE to update two programs that perform the core Individual Master File business functions of posting, settlement, and analysis, and are the most complex individual tax processing programs.

According to the IRS, the ITPE project is scheduled to go live in January 2025, however, a six-month delay could cost up to \$70 million.

What TIGTA Found

For the ITPE project to be successful, the outputs of the ITPE project must match the outputs of the legacy system it will replace. To ensure that the outputs match, the IRS used High-Volume Functional Testing. This testing combines functional and high-volume testing to evaluate code quality and collect performance metrics. The ITPE project team effectively monitored the defect remediation process by:

- Meeting regularly with delivery partners to discuss project status and defect metrics.
- Meeting regularly with enterprise architects, developers, and testers to discuss testing strategies and coordinating defect resolution.
- Tracking and managing defect remediation in a database.

The ITPE project met its performance goal for Filing Season 2023, *i.e.*, processed the code within three hours. However, the IRS closed a defect remediation risk that could affect the ITPE project schedule. Due to the closure, the risk was no longer included in the quarterly Information Technology Investment Report that informed stakeholders, such as Congress, on the status of information technology projects. Subsequently, the IRS approved a new approach to begin parallel operations. This approach was to test all predefined key cycles and remediate as many defects as possible to ensure that the project could meet the go-live date. However, this approach introduced additional complexity and risk, *e.g.*, challenges in proving operational readiness in parallel operations while defects are still being mitigated.

The Inflation Reduction Act of 2022 provided the IRS with funds to improve the administration of the tax system and the services provided to taxpayers. The IRS developed a plan detailing how those resources will be used. The plan consists of initiatives, key projects, milestones, and key dependencies. However, TIGTA could not determine the projects that depend on the timely implementation of the ITPE project because the plan did not name specific project dependencies.

What TIGTA Recommended

TIGTA recommended that the Chief Information Officer include updated defect remediation risk information in Information Technology Investment Reports. TIGTA also recommended that the Chief, Transformation Strategy Office, ensure that the plan to use Inflation Reduction Act resources includes outcomes and key results that represent transformation priorities and that associated projects are managed in a consolidated portfolio and overseen by appropriate governance boards.

The IRS agreed with both recommendations. The IRS plans to include the updated defect remediation risk information in its reporting and stated that the Inflation Reduction Act roadmap will include outcomes and key results aligned to transformation priorities. The IRS also plans to create projects to achieve the key results, overseen by governance.



TREASURY INSPECTOR GENERAL
FOR TAX ADMINISTRATION

U.S. DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20024

September 16, 2024

MEMORANDUM FOR: COMMISSIONER OF INTERNAL REVENUE

FROM: Danny R. Verneuille
Acting Deputy Inspector General for Audit

SUBJECT: Final Audit Report – The Individual Tax Processing Engine Project Is Progressing, but Risks Remain (Audit No.: 2024208014)

This report presents the results of our review to determine whether the Internal Revenue Service (IRS) effectively managed the testing and defect remediation process for the Individual Tax Processing Engine project and whether a delay in implementing the Individual Tax Processing Engine project would affect the schedule of any Inflation Reduction Act Strategic Operating Plan projects or milestones.¹ This review is part of our Fiscal Year 2024 Annual Audit Plan and addresses the major management and performance challenges of *Managing Inflation Reduction Act Transformation Efforts* and *Information Technology Modernization*.

Management's complete response to the draft report is included as Appendix III. If you have any questions, please contact me or Jena Whitley, Acting Assistant Inspector General for Audit (Security and Information Technology Services).

¹ Pub. L. No. 117-169, 136 Stat. 1818.

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Background

In August 2022, Congress enacted the Inflation Reduction Act of 2022 (IRA), giving the Internal Revenue Service (IRS) approximately \$80 billion over the next decade to improve the administration of the tax system and the services provided to taxpayers.¹ By March 2024, Congress reduced IRA funding to approximately \$57.8 billion.² After the passage of the IRA, the Department of the Treasury and the IRS developed the IRS IRA Strategic Operating Plan (SOP) detailing how these resources will be spent over the next decade. One of the key projects in the SOP was to update the programming language for the legacy master files by rewriting it in a modern development language.³

The Customer Account Data Engine 2 program, chartered in 2009, is one of the most complex modernization programs in the Federal Government and involves major changes to core IRS tax processing systems. The Customer Account Data Engine 2 program has data from the Individual Master File (IMF) and is intended to provide state-of-the-art individual taxpayer account processing as well as data-centric technologies to improve service to taxpayers. The Customer Account Data Engine 2 program plans to reengineer the IMF, written in an old programming language called Assembly Language Code, into a modern programming language (Java).⁴ Transitioning to a modern programming language will help with the future development and improved maintainability of the IMF code base. In April 2016, the IRS established the Individual Tax Processing Engine (ITPE) project to update two IMF programs to Java. These programs perform the core IMF business functions of posting, settlement, and analysis, and are the most complex IMF processing programs.

Results of Review

The Individual Tax Processing Engine Project Is Effectively Monitoring Defect Remediation Progress

For the ITPE project to be successful, outputs of the ITPE project must match the outputs of the legacy system it will replace. The IRS uses High-Volume Functional Testing (HVFT) to ensure that the outputs match. This test type combines functional and high-volume testing to evaluate code quality and collect performance metrics. The IRS measured code quality by comparing Assembly Language Code dataset outputs to Java dataset outputs for the two IMF programs. There are three types of HVFT defects:

- ITPE Issues are coding defects in the Java programs.

¹ Pub. L. No. 117-169, 136 Stat. 1818.

² Further Consolidated Appropriations Act, 2024, Pub. L. No. 118-47, 138 Stat. 460 (rescinding \$20.2 billion); Fiscal Responsibility Act of 2023, Pub. L. No. 118-5, 137 Stat. 10 (rescinding \$1.4 billion).

³ See Appendix IV for a glossary of terms.

⁴ Java is an IRS-wide development preference.

- IMF Issues are ITPE identified logic or data issues within the IMF. Some of these are data inconsistencies, *e.g.*, format related, that affect the ITPE's ability to match with the IMF but do not affect the IMF in production.
- Acceptable Differences are issues where action will not be taken to address the identified difference, but downstream testing will be conducted to confirm there are no negative impacts.⁵

In addition to the HVFT, the IRS is performing parallel operations to show that the ITPE project can meet production, functional, and operational readiness criteria. The current parallel operations plan has an eight-month duration starting in April 2024 through December 2024 based on a planned January 2025 go-live date for the ITPE. To begin parallel operations, the IRS required the ITPE project to run 38 cycles to completion with no defects.

The ITPE project met the performance goal for the Filing Season 2023

According to IRS ITPE project documentation, a Service Level Agreement requires the project to process Filing Season 2023 code within three hours.⁶ The October 2023 ITPE Chief Information Officer Briefing document reported that the ITPE project was running at 4.6 hours. According to the HVFT End of Test Report from December 2023, the configuration at the end of Filing Season 2022 Mid-Year (July – October) was using two logical partitions. The ITPE project team conducted additional analysis and determined the system needed two additional logical partitions. The test report showed that after increasing the number of logical partitions from two to four, the three-hour performance goal was consistently met.

The ITPE project monitored testing and defect remediation

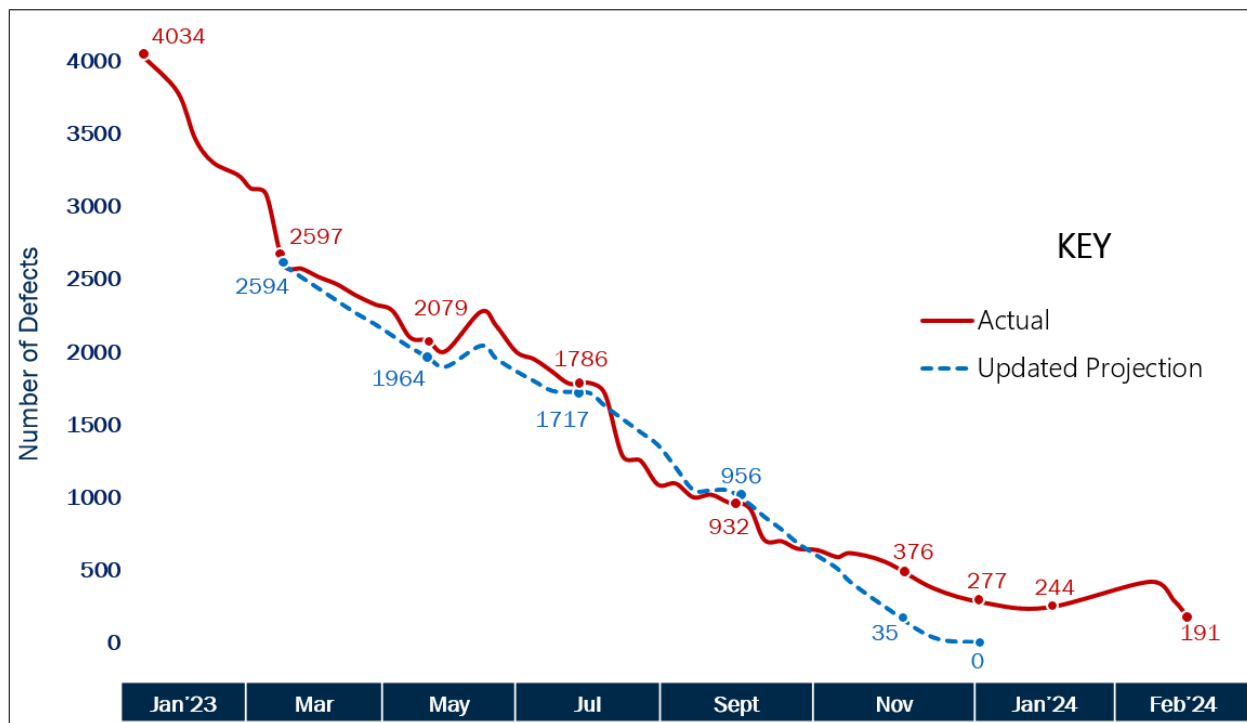
The ITPE project team effectively monitored testing and defects through the following activities:

- Meeting regularly with delivery partners to discuss project status and defect metrics.
- Meeting regularly with enterprise architects, developers, and testers to discuss testing strategies and coordinate defect resolution. A calendar of the working sessions for April 2024 showed meetings were scheduled twice a week for various teams.
- Tracking and managing defects in a database.
- Tracking defect remediation progress through its defect remediation chart. The chart was created to track progress beginning in October 2022. Figure 1 shows the number of projected and/or actual remaining defects from January 2023 through February 2024.

⁵ Applications Development management stated that Acceptable Differences are not prioritized by severity. The impact of a potential Acceptable Difference is assessed, and any identified negative impact or severity to downstream systems would disqualify it from becoming an Acceptable Difference.

⁶ IRS, *ITPE Performance Engineering Model Initial DRAFT Version Number 0.4* (Nov. 29, 2023).

Figure 1: Unresolved HVFT Defects as of February 26, 2024



Source: Treasury Inspector General for Tax Administration's analysis of the ITPE Integrated Project Team Meeting presentation dated February 28, 2024.

The ITPE project team's monitoring and measuring activities enabled them to realize that the project was at risk of not timely completing the work required to begin parallel operations in April 2024 and go-live in January 2025. As a result, on August 22, 2023, the project team formally entered Risk 38236, *ITPE Timely Start to Parallel Operations*, in the IRS system for tracking risks and issues. Identifying these problems in advance allowed time to develop options for starting parallel operations.

Risk Status Was Incorrectly Updated

The September 2023 ITPE Project Health Checkpoint reported that the criteria to run 38 cycles to completion with no defects would not be met prior to the parallel operations start date of April 2024. This was due to the inability to address the defects for the code and data formats needed prior to April 2024. The October 2023 ITPE Chief Information Officer Briefing document reported that Risk 38236 had occurred. As a result, the project's next step was to propose recommendations for alternative parallel operations schedules to address the gap in key cycles tested and review them with the Business Systems Modernization Office within the Taxpayer Services Division.

According to ITPE management, on November 16, 2023, the Chief Information Officer verbally approved a new approach to begin parallel operations in April 2024. The new approach was to test all predefined key cycles and remediate as many defects as possible to ensure that the project could meet the January 2025 go-live date. However, this approach introduced additional complexity and risk, *e.g.*, challenges in proving operational readiness in parallel operations while defects are still being mitigated. In addition, to meet the January 2025 go-live

date, the project will need to continuously monitor and gather data throughout the Filing Season 2024 HVFT and parallel operations. Figure 2 lists the additional concerns and risks associated with the new approach to parallel operations.

Figure 2 – Concerns and Risks Associated With the New Approach

1	Proving operational readiness with defects: The ITPE will need to prove operational readiness in parallel operations while defect remediation continues, which could affect the Business and Information Technology's confidence in it.
2	Simultaneous defect resolution: The ITPE team will need to prepare to resolve issues identified during key cycle testing and during parallel operations simultaneously and be able to handle any major issues in production within Service Level Agreements.
3	Potential defect complexity and severity: The complexity and severity of defects uncovered in parallel operations could cause the team to be unable to mitigate them fast enough to allow for any meaningful period of stable parallel operations prior to January 2025.
4	No peak filing season parallel operations: Parallel operations will not be conducted during peak filing season, meaning the ITPE will not run in production during peak filing season until after going live in Filing Season 2025. As a result, there is increased concern of encountering issues during peak Filing Season 2025.
5	Delayed end of year cycles testing: End of year cycles for Filing Season 2024 will not be fully tested before the January 2025 cutover, so associated defects may need to be remediated in mid-year 2025 after going live.
6	System availability for testing: The ITPE will need mainframe capacity to test and validate defects while parallel operations and IMF production processes are running, which may be a significant challenge during peak periods.
7	IMF fallback planning: The IMF will need to be maintained in parallel to the ITPE in preparation for fallback to the IMF, which will be more essential due to the previously listed concerns.

Source: ITPE Chief Information Officer Briefing dated November 16, 2023: ITPE Approach to Meet January 2025.

After the Chief Information Officer approved the new approach, Risk 38236 was closed in the IRS risk and issue tracking system on December 18, 2023, and in the Fiscal Year 2024 first quarter Information Technology Investment Report.⁷ The new approach is a mitigation plan to address a schedule problem and is currently in progress and being monitored by the ITPE project team.

However, the IRS should not have closed Risk 38236 because defect remediation was not timely completed, and a mitigation plan was put into effect. The risk should have been changed to Monitoring status in the IRS risk and issue tracking system and changed to yellow status in the Information Technology Investment Report to indicate that a mitigation is in progress.

The IMF Modernization Portfolio Risk and Issue Management Plan describes the process for identifying, managing, reporting, and escalating IMF modernization risks and issues. The final stage of the risk lifecycle, aptly called Close or Monitor, is when the risk is closed or is converted into monitoring status in the IRS risk and issue tracking system. A risk is closed when the closure criteria is met and there is no longer a possibility that it may occur and become an issue. The IMF Modernization Director approves all risks for closure. The Risk Indicator for the

⁷ The Information Technology Investment Report is issued quarterly.

Information Technology Investment Report states that yellow is used when mitigations for a risk are in progress and if the risk occurs it will have an impact but will not impede the core mission of the program.

ITPE management stated that the risk was closed because the mitigation was implemented, despite the potential concerns and risks associated with the new approach. Enterprise Program Management Office personnel stated that the risks listed in Figure 2 were not official risks. They also stated that if a concern or risk affects a project's scope, cost, or schedule, it would be vetted through the Risk and Issue Management Process. Official risks and issues are included in the Information Technology Investment Reports.

Without reporting all existing risks and issues in the Information Technology Investment Reports, external stakeholders, *e.g.*, Congress and the Government Accountability Office, are not informed of the risks and issues associated with the new parallel operations approach. These risks could potentially delay the January 2025 go-live date or projects dependent on stable ITPE code such as the Taxpayer Account Management – Individual project. The IRS estimated that a six-month delay could cost up to \$70 million.

In April 2024, we asked IRS personnel whether a risk associated with ITPE remediation of defects during parallel operations should be included in the Information Technology Investment Reports. IRS personnel stated that a new risk was being drafted to capture the potential impact if the backlog of defects or cycle reruns exceeds the time or resources available.

Management Action: In June 2024, ITPE management provided a copy of the new defect remediation risk statement that was approved and entered in the IRS risk and issue tracking system. According to ITPE management, this new risk will be included in the next Information Technology Investment Report.

Recommendation 1: The Chief Information Officer should include updated defect remediation risk information in Information Technology Investment Reports.

Management's Response: The IRS agreed with this recommendation. The Chief Information Officer will ensure that the updated defect remediation risk information is included in the Information Technology Investment Reports.

Project Dependencies Are Unknown

We reviewed the IRA SOP which outlines how the IRS will deploy the investments from IRA funding to better serve taxpayers, tax professionals, and the broader tax ecosystem. Figure 3 outlines the five objectives of the IRA SOP.

Figure 3: IRA Transformation

Objective 1	Dramatically improve services to help taxpayers meet their obligations and receive the tax incentives for which they are eligible
Objective 2	Quickly resolve taxpayer issues when they arise
Objective 3	Focus expanded enforcement on taxpayers with complex tax filings and high-dollar noncompliance to address the tax gap
Objective 4	Deliver cutting-edge technology, data, and analytics to operate more effectively
Objective 5	Attract, retain, and empower a highly skilled, diverse workforce and develop a culture that is better equipped to deliver results for taxpayers

Source: IRS IRA SOP, Fiscal Years 2023-2031.

As a part of Initiative 4.1 under Objective 4, which focuses on transforming core account data and processing, the IRS plans to modernize technology architecture that will help the IRS improve operations and provide new tools throughout the taxpayer and customer-services experience. Within Initiative 4.1, the IRS lists five key projects, eleven milestones, and a list of key dependencies. Transition and Strategy Office personnel who are responsible for managing the SOP stated that under Initiative 4.1, key project number one includes the ITPE project as well as other projects that would need to be modernized. However, the IRA SOP does not identify specific projects. Therefore, we could not determine the projects that depend on the timely implementation of the ITPE project. Subsequently, Transition and Strategy Office management stated that the SOP is a high-level strategic view of IRS transformation, and not intended to include specific projects. Figure 4 describes the eight initiatives of the IRA SOP Objective 4.

Figure 4: IRA SOP Objective 4 Initiatives

4.1	Transform core account data and processing: The IRS will modernize the systems used to access and process taxpayer data.	4.5	Maximize data utility: The IRS will improve the storage and management of data to support improved taxpayer services and enforcement.
4.2	Accelerate technology delivery: The IRS will deliver faster and better results by accelerating design, development, and delivery of user centered technology by shifting to a “product and platform” operating model that incorporates business and technology perspectives.	4.6	Apply enhanced analytics capabilities to improve tax administration: IRS employees will use data and insights to enhance delivery of tax administration and improve the taxpayer experience.
4.3	Improve technology operations: The IRS will enhance core technology processes and platforms to support the delivery of expanded capabilities for taxpayers and employees.	4.7	Strategically use data to improve tax administration: The IRS will use enhanced data and explore additional innovative analytic techniques to improve strategic planning, decision-making, and compliance measurement.
4.4	Continue to ensure data security: The IRS will continue to protect taxpayer data and IRS systems from cyber threats as it transforms.	4.8	Partner to expand insights: The IRS will engage with external partners to develop new insights to generate value for taxpayers and policymakers.

Source: IRS IRA SOP, Fiscal Years 2023-2031.

Current, complete, and accurate information is necessary for management to make informed decisions and to achieve objectives and evaluate risks. In February 2024, the Transition and Strategy Office Advisory Committee met and proposed a new operating model that uses a roadmap to focus on the outcomes and key results to align projects within the SOP objectives. In May 2024, the IRS issued a Draft IRA Enterprise Roadmap that prioritizes transformation efforts; however, we found that this roadmap contained minimal Objective 4 information. Without quality information in the roadmap, the IRS cannot ensure effective oversight of the projects related to Objective 4.

Recommendation 2: The Chief, Transformation Strategy Office, should ensure that the plan to use IRA resources includes outcomes and key results that represent transformation priorities and that associated projects are managed in a consolidated portfolio and overseen by appropriate governance boards.

Management’s Response: The IRS agreed with this recommendation. The IRS stated that the IRA Enterprise Roadmap for Calendar Year 2025 and 2026 will have outcomes and key results aligned to transformation priorities. Projects will be created to achieve the key results managed through the IRA portfolio management process and overseen by transformation governance.

Appendix I

Detailed Objective, Scope, and Methodology

The overall objective of this audit was to determine whether the IRS effectively managed the testing and defect remediation process for the ITPE project and whether a delay in implementing the ITPE project would affect the schedule of any IRA SOP projects or milestones. To accomplish our objective, we:

- Determined whether the IRS effectively monitored and measured the progress of the ITPE testing and defect remediation process by interviewing personnel and reviewing documentation of testing results and defect management.
- Assessed IRS-identified ITPE project risk of starting parallel operations prior to the completion of cycle testing by reviewing briefings and risk documentation.
- Determined whether the ITPE project met its performance goal for Filing Season 2023 by interviewing ITPE personnel and reviewing Service Level Agreement requirements and the test report.
- Determined the role of the ITPE project in accomplishing IRA SOP Initiative 4.1 and identified the projects or milestones that are dependent on the ITPE implementation by interviewing Transformation and Strategy Office personnel and reviewing the IRA SOP key projects dependent on the completion of the ITPE project.

Performance of This Review

This review was performed with information obtained from the ITPE Project Management Office, Enterprise Program Management Office, and Business Systems Modernization Office in New Carrollton, Maryland; and the Transformation and Strategy Office in Washington, D.C., during the period November 2023 through August 2024. 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 Jena Whitley, Acting Assistant Inspector General for Audit (Security and Information Technology Services); Kasey Koontz, Director; Khafil-Deen Shonekan, Audit Manager; Tina Wong, Lead Auditor; Christian Nelson, Information Technology Specialist; and Laura Christoffersen, Information Technology Specialist (Data Analytics).

Data Validation Methodology

We obtained ITPE Integrated Project Team reports and supporting documentation. We completed a data reliability assessment to ensure that the data are sufficiently reliable to use to complete our audit objectives. We also validated the reports to ensure that the information is accurate and complete by discussing the results with IRS management and viewed a demonstration of the system that manages defects to verify its data. We determined that the data were sufficiently reliable for the purposes of this report.

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: policies and procedures for risk identification and management, the IRA SOP, Service Level Agreement requirements, and testing documents. We evaluated these controls by interviewing IRS employees and reviewing project documentation and status reports. We also reviewed and analyzed multiple iterations of the ITPE defect remediation chart.

Appendix II

Outcome Measure

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

Type and Value of Outcome Measure:

- Reliability of Information – Potential; one quarterly Information Technology Investment Report that should have been updated to inform external stakeholders of risks and issues (see Recommendation 1).

Methodology Used to Measure the Reported Benefit:

In December 2023, the IRS closed Risk 38236, *ITPE Timely Start to Parallel Operations*, in the IRS risk and issue tracking system and in the Fiscal Year 2024 first quarter Information Technology Investment Report. The new approach for beginning parallel operations is a mitigation plan to address a schedule problem, *i.e.*, the inability to achieve requirements to begin parallel operations in April 2024 and going live in January 2025. The mitigation plan is currently in progress and is being monitored. Because defect remediation was not timely completed, the risk should have been changed to Monitoring status in the IRS risk and issue tracking system and changed to yellow status in the Information Technology Investment Report to indicate a mitigation is in progress.

Appendix III

Management's Response to the Draft Report



CHIEF INFORMATION OFFICER

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, DC 20224

August 28, 2024

MEMORANDUM FOR ACTING DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Rajiv Uppal, Chief Information Officer

Rajiv K. Uppal

Digitally signed by Rajiv K. Uppal
Date: 2024.08.28 11:53:09 -04'00'

SUBJECT: Draft Audit Report – The Individual Tax Processing Engine Project Is Progressing, but Risks Remain (Audit #2024208014)

Thank you for the opportunity to review your draft audit report and address the report observations. The audit team has been instrumental in validating that the IRS has effectively managed the Individual Tax Processing Engine (ITPE) project, which is a flagship effort in the agency's broader transition away from legacy code.

As noted in the report, the ITPE project met the Filing Season 2023 performance goal and continues to make progress. The IRS is currently conducting high volume functional testing and performing parallel operations to show that the ITPE project can meet production, functional, and operational readiness criteria. We remain on track to retire significant portions of legacy code in 2025. The audit team has identified areas for further improvement and the IRS concurs with the report recommendations, including the associated outcome measure. Please refer to the attached planned corrective actions for specific details.

The IRS values the Treasury Inspector General for Tax Administration's continued support and assistance. If you have any questions, please contact me at (202) 317-5000, or a member of your staff may contact Patricia Depreo, Director of Customer Account Data Engine 2, at (801) 620-4260.

Attachment

Attachment

Audit #2024208014, The Individual Tax Processing Engine Project Is Progressing, but Risks Remain

RECOMMENDATION 1: The Chief Information Officer should include updated defect remediation risk information in Information Technology Investment Reports.

CORRECTIVE ACTION 1: The IRS agrees with this recommendation. The Chief Information Officer will ensure the updated defect remediation risk information is included in the Information Technology (IT) Investment Reports.

IMPLEMENTATION DATE: Implemented.

RESPONSIBLE OFFICIAL: Associate Chief Information Officer, Modernization

RECOMMENDATION 2: The Chief, Transformation Strategy Office, should ensure that the plan to use IRA resources includes outcomes and key results that represent transformation priorities and that associated projects are managed in a consolidated portfolio and overseen by appropriate governance boards.

CORRECTIVE ACTION 2: The IRS agrees with this recommendation. The IRA Enterprise Roadmap for Calendar Year 2025 & 2026 will have Outcomes and Key Results aligned to transformation priorities. Projects will be created to achieve the Key Results managed through the IRA portfolio management process and overseen by transformation governance.

IMPLEMENTATION DATE: May 15, 2025

RESPONSIBLE OFFICIAL: Director, Strategic Integration, Transformation & Strategy Office

Appendix IV

Glossary of Terms

Term	Definition
Customer Account Data Engine 2	Establishes a single database that houses all individual taxpayer accounts, including IMF data, which provides IRS employees the ability to view updated account information online.
Cycles	Represent the time periods of IRS submission processing. For example, the third weekly cycle in Calendar Year 2024 (cycle 202403) spanned Friday, January 12, 2024, through Thursday, January 18, 2024. For ITPE, the Business selected key periods for testing that span different transaction types, <i>e.g.</i> , Refund, Peak Filing Season, Mid-Year, Extension/Complex Returns, End-of-Year, that occur at different times of the year.
Defect Remediation Chart	A graph that tracks defect remediation progress by comparing the projected number of unresolved defects to the actual number of unresolved defects each month.
Downstream System	A system that receives and processes another system's information data.
Filing Season	The period from January 1 through mid-April when most individual income tax returns are filed.
Fiscal Year	Any yearly accounting period, regardless of its relationship to a calendar year. The Federal Government's fiscal year begins on October 1 and ends on September 30.
High-Volume Functional Testing	Invented for ITPE to test that the converted code meets functionality and performance requirements.
Individual Tax Processing Engine	A modernization effort to convert two IMF programs written in an old programming language into a modern programming language with the intent of maintaining all current functionality and capabilities.
Logical Partition	Segments a high-capacity hardware configuration into multiple independent operating units. Each configuration is a distinct operating environment and may be grouped together, but the configurations need to be reviewed individually because they are often configured differently.
Master File	The IRS database that stores various types of taxpayer account information. This database includes individual, business, and employee plans and exempt organizations data.
Parallel Operations	Compares legacy IMF output with the output generated by the Java code for two IMF programs and will occur prior to the ITPE moving into production.
Service Level Agreement	A document that describes the minimum performance criteria a provider promises to meet while delivering a service, typically also setting out the remedial action and any penalties that will take effect if performance falls below the promised standard.

The Individual Tax Processing Engine Project Is Progressing, but Risks Remain

Term	Definition
Taxpayer Account Management – Individual Project	A Customer Account Data Engine 2 project that will modernize how the IRS receives, processes, and closes the accounting cycle, <i>e.g.</i> , posting, settlement, analysis, for individual taxpayer accounts.

Appendix V

Abbreviations

HVFT	High-Volume Functional Testing
IMF	Individual Master File
IRA	Inflation Reduction Act of 2022
IRS	Internal Revenue Service
ITPE	Individual Tax Processing Engine
SOP	Strategic Operating Plan



**To report fraud, waste, or abuse,
contact our hotline on the web at www.tigta.gov or via e-mail at
oi.govreports@tigta.treas.gov.**

**To make suggestions to improve IRS policies, processes, or systems
affecting taxpayers, contact us at www.tigta.gov/form/suggestions.**

Information you provide is confidential, and you may remain anonymous.