



*The Account Management Services Project  
Is Meeting Its Development Goals*

**March 3, 2008**

**Reference Number: 2008-20-053**

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



TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

March 3, 2008

**MEMORANDUM FOR CHIEF INFORMATION OFFICER**

**FROM:**

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

**SUBJECT:**

Final Audit Report – The Account Management Services Project Is Meeting Its Development Goals (Audit # 200720004)

This report presents the results of our review of the development of the Accounts Management Services (AMS) project. The overall objective of this review was to determine whether AMS project management and development activities are effective in providing a sound basis for the delivery and deployment of AMS releases.<sup>1</sup> This review was part of our Fiscal Year 2007 audit plan for reviews of the Internal Revenue Service (IRS) Business Systems Modernization efforts.

*Impact on the Taxpayer*

The IRS is continuing to modernize its databases to provide immediate access to account data, enable real-time transaction processing, and ensure daily account settlement to improve customer service and business results. The AMS project was initiated in May 2006 and has been chartered to address these needs. The objective of the AMS project is to provide an integrated approach to view, access, update, and manage taxpayer accounts by providing IRS employees with the tools to access information quickly and accurately in response to complex customer inquiries and to update taxpayer accounts on demand.

*Synopsis*

Reviews of the initial AMS releases showed the project team successfully implemented Enterprise Life Cycle<sup>2</sup> and Modernization and Information Technology Services organization project management processes and activities. These processes and activities included project

---

<sup>1</sup> See Appendix V for a Glossary of Terms.

<sup>2</sup> Appendix IV provides an overview of the Enterprise Life Cycle process.



*The Account Management Services Project  
Is Meeting Its Development Goals*

---

justification, contract management, risk management, configuration management, performance management, and transition management.

The AMS Project Management Plan defines the project, the scope of work to be performed, and the planned methodology for managing project activities. The Plan also identifies the capabilities that Release 1 must implement for it to be considered complete. The AMS project team successfully planned work schedules, identified and addressed potential risks to project development, and coordinated with appropriate staff to implement initial release capabilities. Although the AMS project team is on schedule to make the proposed processing capabilities available, its implementation is dependent on the Modernization and Information Technology Services organization's abilities to integrate these project capabilities into taxpayer account processing.

### *Response*

The Chief Information Officer appreciated the comments and observations acknowledging the successful implementation of the Enterprise Life Cycle and the Modernization and Information Technology Services organization project management processes for AMS Release 1. Management's complete response to the draft report is included as Appendix VI.

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



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

*Table of Contents*

**Background** .....Page 1

**Results of Review** .....Page 3

    The Initial Releases of the Account Management Services Project Have  
    Adequately Incorporated Prescribed Project Management Processes .....Page 3

    The Account Management Services Project Is on Schedule to Deliver  
    Essential Release Components and Support the Customer Account  
    Data Engine Capabilities.....Page 6

**Appendices**

    Appendix I – Detailed Objective, Scope, and Methodology .....Page 10

    Appendix II – Major Contributors to This Report .....Page 12

    Appendix III – Report Distribution List .....Page 13

    Appendix IV – Enterprise Life Cycle Overview .....Page 14

    Appendix V – Glossary of Terms .....Page 18

    Appendix VI – Management’s Response to the Draft Report .....Page 20



*The Account Management Services Project  
Is Meeting Its Development Goals*

---

*Abbreviations*

AMS	Account Management Services
CADE	Customer Account Data Engine
IRS	Internal Revenue Service



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

## *Background*

In the Internal Revenue Service's (IRS) present environment, taxpayers and practitioners do not always receive timely and accurate responses to requests and inquiries. IRS employees assigned to resolve taxpayer and practitioner requests and inquiries work with dated technologies and business processes that impede productivity and access to comprehensive, timely information. IRS employees rely on data residing on the Master File,<sup>1</sup> which is updated weekly. The Integrated Data Retrieval System provides IRS employees data entry and retrieval access to taxpayer accounts on the Master File. These actions are accomplished by using computer codes rather than commonly-used English terms. The absence of familiarity with the various computer codes often results in employee errors. Because of this complex and extended data retrieval and update process, IRS employees' workloads increase due to repeat callers, duplicate correspondence, and erroneous notices sent to customers.

***IRS employees must execute a series of applications to research issues and send transactions to update taxpayer accounts on the Master File.***

In Calendar Year 2006, the IRS Information Technology Modernization Vision and Strategy effort revalidated the need for modernized tax administration capabilities. The IRS is continuing to modernize its databases to provide immediate access to account data, enable real-time transaction processing, and ensure daily account settlement to improve customer service and business results. Realization of these capabilities requires the implementation of tools that allow for the retention of taxpayer accounts in the modernized Customer Account Data Engine (CADE) database through online access, monitoring, and adjustment.

The Account Management Services (AMS) project was initiated in May 2006 and has been chartered to address these needs. The objective of the AMS project is to provide an integrated approach to view, access, update, and manage taxpayer accounts by providing IRS employees with the tools to access information quickly and accurately in response to complex customer inquiries and to update taxpayer accounts on demand.

The AMS release management plan proposes a sequence of four releases that use a biannual release approach paralleling the CADE delivery schedule.

---

<sup>1</sup> See Appendix V for a Glossary of Terms.



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

- AMS Release 1, with deployment plans for subreleases Release 1.1 in September 2007,<sup>2</sup> Release 1.2A and Release 1.2B in January 2008, and Release 1.3 in October 2008, will deliver the underlying infrastructure for the succeeding AMS releases.

On May 16, 2007, funding for Release 1.2B of the AMS (currently scheduled for delivery in January 2008) was transferred to the control of the Corporate Notices project.

The commercial off-the-shelf product, *xPression*, will manage the business rules for notice composition and compose the notices. Release 1.2B will provide data processing from *xPression* enabling the CADE to retain accounts when a tax return requires one of eight selected notices, including four math error notices and four information notices.

- AMS Release 2, consisting of two subreleases (July 2009 and January 2010), will complete the application development to enable future AMS releases to perform online transactions using the CADE.
- AMS Releases 3 and 4 will work in conjunction with the CADE to retire the IRS' existing Master File processing systems, including the Integrated Data Retrieval System.

This review was performed at the Modernization and Information Technology Services organization's facilities in New Carrollton, Maryland, and in the Treasury Inspector General for Tax Administration office in Laguna Niguel, California, during the period August through November 2007. 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. This review was part of the Treasury Inspector General for Tax Administration Fiscal Year 2007 Annual Audit Plan coverage under the major management challenge of Modernization of the IRS. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.

***The Corporate Notices project plans to enable the CADE to support and manage taxpayer accounts that require generation of notices.***

---

<sup>2</sup> AMS Release 1.1 received authorization to operate on September 28, 2007.



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

## *Results of Review*

### ***The Initial Releases of the Account Management Services Project Have Adequately Incorporated Prescribed Project Management Processes***

The Enterprise Life Cycle<sup>3</sup> is the IRS' standard approach to implement business change and information systems projects. It provides robust and diverse techniques for managing projects that equip project teams to deliver a quality product. This guidance enhances requirement gathering, design, and development procedures. The Enterprise Life Cycle also provides directives and processes to define project management work products and activities. Reviews of AMS Releases 1.1, 1.2A, and 1.2B showed the project team successfully implemented Enterprise Life Cycle and Modernization and Information Technology Services organization project management processes and activities. These processes and activities included project justification, contract management, risk management, configuration management, performance management, and transition management.

### ***The AMS project team adequately justified the need for the project, managed contracts, and reported contract costs***

The AMS project team adequately developed and managed plans to design, develop, and execute the project. These plans included adequate descriptions of project goals and processes, as well as budgetary justification. This support was presented in the September 10, 2007, submission of the Exhibit 300 - *Capital Asset Plan and Business Case Summary*, which is in compliance with Office of Management and Budget requirements outlined in Circular Number A-11, *Preparation, Submission, and Execution of the Budget*.

The AMS project team and project stakeholders adequately managed contracts, task orders, work requests, and memorandums of agreements to execute the project's design and development. The assignment of responsibilities and deliverables associated with AMS project activities was properly documented. Contract management and the reporting of contracting costs were adequate. AMS project costs reported in management reviews were consistent with budgeted figures provided to the Office of Management and Budget in the Exhibit 300.

In Fiscal Years 2006 and 2007, the AMS project obtained funds for development activities from both the Business Systems Modernization Management Reserve and the Information Systems' Operations and Support budget as shown in Figure 1.

---

<sup>3</sup> Appendix IV provides an overview of the Enterprise Life Cycle process.





*The Account Management Services Project  
Is Meeting Its Development Goals*

**Figure 1: Account Management Services Project Funding**

<b>Funding Source</b>	<b>Fiscal Year 2006 (in millions)</b>	<b>Fiscal Year 2007 (in millions)</b>	<b>Totals (in millions)</b>
Business Systems Modernization Management Reserve	\$7.5	\$19.45	<b>\$26.95</b>
Information Systems' Operations and Support	\$4.3	\$1.57	<b>\$5.87</b>
<b>Totals</b>	<b>\$11.8</b>	<b>\$21.02</b>	<b>\$32.82</b>

*Source: AMS Exhibit 300 - Capital Asset Plan and Business Case Summary submitted September 10, 2007, and AMS Project Management Plan dated September 11, 2006.*

**The AMS project team generally meets weekly to identify, discuss, and resolve risks and issues affecting project management and development**

Modernization program management, stakeholders, and executive-level decision makers have a systematic and repeatable process for identifying, managing, and regularly communicating the status of risks, issues, and action items. The application of a common process by all organizations ensures that risks, issues, and action items are identified early; collateral impacts are recognized across projects; appropriate management strategies are developed; and risks, issues, and action items are escalated to the management levels necessary to resolve them on time.

As part of their weekly meetings, the AMS project team adequately identifies risks, issues, and action items and documents them on the Item Tracking Reporting and Control system. The documentation identifies the risk or issue, as well as the party responsible for developing the resolution. For example, the AMS project team identified the ability to appropriately and sufficiently staff project design and development efforts as a risk to the project's success. Subsequently, the project team took appropriate actions to staff the project. The AMS Release 1.1 and Release 1.2A integrated project schedule showed all tasks were assigned to project members.

**The AMS project team took appropriate actions to manage its requirements**

Requirements management is the process that controls and documents all project requirements for the duration of a project. It involves establishing the requirements, controlling all subsequent



---

## *The Account Management Services Project Is Meeting Its Development Goals*

---

requirements changes, and establishing and maintaining agreement among the customers and those who provide the requested products or services. Requirements management ensures requirements are clear, traceable, verifiable, documented, and controlled.

The requirements management process requires the development of a business systems requirements report that documents a set of requirements that define the system being developed or enhanced by the project. These requirements form the basis for the business solution design, development, integration, testing, and deployment.

In addition, the requirements management process requires the development of a requirements traceability matrix, which is a report that documents traceability relationships between requirements, rules, and associated work products and assists in identifying areas of suspect traceability. The requirements traceability matrix is needed to conduct impact assessments of requirements changes and supports requirements verification.

The Release 1.1, Release 1.2A, and Release 1.2B<sup>4</sup> business systems requirements reports adequately document requirements as prescribed by the Enterprise Life Cycle guidance. Further, the Release 1.1 and Release 1.2A requirements traceability matrix provide bi-directional traceability of the requirements. The Release 1.2B requirements traceability matrix is currently being developed.

***The AMS project team followed prescribed requirements management processes. The processes include development of the business systems requirements report and requirements traceability matrices.***

### ***The AMS project team took appropriate actions to plan configuration management activities***

Configuration management is the process used to identify and control items such as project requirements and deliverables. Setup and maintenance of various repositories are necessary to effectively support the AMS project. The AMS project configuration management plan assigns responsibility for setup and maintenance of repositories for project deliverables and also establishes a process to initiate and approve project change requests.

### ***The AMS project team took appropriate actions to monitor project schedule, cost, and quality performance***

The AMS project uses the Management Information Center Schedule Analysis Workbook to monitor and report schedule performance against baselines. For cost performance, the project team tracks planned and actual expenses by release and milestone. The project team also tracks requests and obligations weekly using the web-based Request Tracking System and Integrated

---

<sup>4</sup> The AMS project had responsibility for the development of the Release 1.2B business systems requirements report.



---

## *The Account Management Services Project Is Meeting Its Development Goals*

---

Financial System. These processes allow the project team to adequately monitor, track, and report project schedule and cost performance.

A Quality Management Plan, issued on September 17, 2007, established the goals, resources, and activities to assure the quality of AMS project work products and processes. The Program and Project Operations office performed work product reviews as prescribed by the Quality Management Plan. The Applications Development Quality Assurance organization is in the process of scheduling a compliance audit for the AMS project.

### **The AMS project team took appropriate actions to plan for managing transition risks and issues**

Transition management is defined as the management of activities associated with the smooth transfer of modernized business capabilities, including business processes and systems, from the developer to the receiving organization. Transition management activities prepare the receiving organization to use, operate, and maintain modernized systems. This includes helping the receiving organization understand the new system and the implications on the receiving organization's work and helping it address those implications. The AMS transition management plan was issued on June 29, 2007, and provides appropriate steps for project implementation, operation, and maintenance.

Because the AMS project team adequately followed project management guidance established by the Enterprise Life Cycle, work products and deliverables have met or are on schedule to meet project goals. This has been exemplified by the timely delivery of AMS Release 1.1.

### ***The Account Management Services Project Is on Schedule to Deliver Essential Release Components and Support the Customer Account Data Engine Capabilities***

The AMS Project Management Plan defines the project, the scope of work to be performed, and the planned methodology for managing project activities. The Plan also identifies the capabilities that Release 1 must implement for it to be considered complete. The AMS project team successfully planned work schedules, identified and addressed potential risks to project development, and coordinated with appropriate staff to implement the required Release 1.1 capabilities. Using these same controls and tools, Release 1.2A is on schedule for timely delivery of planned capabilities. Although the AMS project team is on schedule to make the proposed processing capabilities available, its implementation depends on the Modernization and Information Technology Services organization's abilities to integrate these project capabilities into taxpayer account processing.



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

**The AMS project team participated in and benefited from several coordinated efforts to help ensure successful project development**

In August 2006, the IRS created guidelines for the establishment and operation of the AMS/CADE Integration Review Team. The Team generally meets monthly to provide multiple programs with the support needed to resolve issues in a timely manner relating to business requirements and application design and development. The Team consists of executives, managers, and specialists from the AMS, CADE, and Corporate Notices projects; the Wage and Investment Division; the Enterprise Architecture and Systems Architecture and Engineering organizations; and the Business Rules and Requirements Management Office. A review of the AMS/CADE Integration Review Team meeting minutes shows the Team has effectively performed its duties to provide integrated program-level support to resolve technical and business integration issues. The support includes the following:

- Risks and issues identified by the AMS/CADE Integration Review Team are controlled on the Item Tracking Reporting and Control system. The Team initiates action items to address each risk or issue until closure and develops worksheets, including an Issue Statement and Issue Impact, for concerns affecting the AMS and CADE projects.
- Members from the AMS/CADE Integration Review Team participated in a series of AMS/CADE technical workshops initiated on July 10, 2007, under the direction of the IRS Enterprise Architecture organization. The primary goal of these workshops was to obtain a common understanding of the current and emerging capabilities and interactions of the AMS, the CADE, and the legacy systems. The workshops identified and framed issues, developed an approach that provides a 5-year view of the future capabilities and interactions, and supported incremental steps planned for the 5-year time period (e.g., AMS Release 2.1/CADE Release 5.1). The workshops also drew on the broad cross section of experience and perspective of the participants to accomplish stated goals and objectives.

The AMS and CADE project teams coordinated testing efforts to ensure planned integrated application capabilities were accomplished and to achieve efficiency in testing processes. The Testing, Assessment, and Documentation group properly scheduled, prioritized, and performed Systems Acceptability Testing for AMS Release 1.1 and CADE Release 3.1. The items tested and the test results were communicated in a timely manner to both the AMS and CADE project teams.

In addition, the AMS and CADE project teams considered the feasibility of their scheduled release deployment plans. Subsequently, Business Systems Modernization program members and IRS business owners successfully collaborated and delivered a coordinated AMS/CADE release strategy. In June 2007, the Customer Service Executive Steering Committee approved a revised AMS/CADE Release Content Master Plan linking AMS and CADE deliverables through Calendar Year 2012.



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

**The AMS project team delivered capabilities for the CADE to electronically update taxpayer accounts**

The AMS project team completed Release 1.1 deliverables and work products as described in the Enterprise Life Cycle (including the logical and physical designs). The project team received a timely Milestone 4A exit approval from the Customer Service Executive Steering Committee on May 3, 2007, and subsequently performed system development work.

AMS Release 1.1, which began operating on October 1, 2007, uses the Enterprise Application Integration Broker infrastructure to provide a foundation for future AMS releases. The Enterprise Application Integration Broker sends address change transactions to the CADE.

On October 1, 2007, the AMS pilot successfully processed the first transactions updating taxpayer accounts through the CADE and the Integrated Data Retrieval System using the Enterprise Application Integration Broker. With the addition of this capability, the number of accounts retained in the CADE will increase over time while the number of accounts returned to the current processing environment will decrease.

The AMS project team also completed the Release 1.2A deliverables and work products as required by the Enterprise Life Cycle (including the logical and physical designs), and received a timely Milestone 4A exit approval from the Customer Service Executive Steering Committee on July 24, 2007. The project team is currently performing system development work.

***The Enterprise Application Integration Broker infrastructure uses webMethods, a commercial off-the-shelf product, to provide data processing capabilities between the AMS, the CADE, and the current processing environment systems.***

AMS Release 1.2A, scheduled for delivery in January 2008, will provide IRS employees the opportunity to electronically access transcripts of taxpayer account activity. Currently, paper transcripts are printed onsite and manually distributed to IRS employees for action. Once the IRS employees are assigned the electronic transcripts, they will be able to view and manage their workload inventory, request assistance, and resolve certain taxpayer issues through Desktop Integration.

The benefits expected from this release include:

- Reduced paper and printing costs realized by converting paper transcripts to electronic transcripts.
- Reduced transcript handling time realized by eliminating paper handling, manual work assignment, and tracking.
- Enhanced workflow with the implementation of an inventory management and tracking system.



*The Account Management Services Project  
Is Meeting Its Development Goals*

---

- Implementation of an inventory management framework that supports workflow management for future AMS inventories.

As of October 25, 2007, the AMS Project Director stated Release 1.2A was on schedule for a timely delivery in January 2008. The Modernization and Information Technology Services organization governance bodies (Customer Service Executive Steering Committee and the Information Technology Project Control Review board) supported this assessment through their regular review processes.

By effectively coordinating development efforts with all appropriate stakeholders, following Enterprise Life Cycle guidelines, and executing the project management plan, the AMS project team delivered planned capabilities and provided support for the CADE to electronically update taxpayer accounts.

Overall, the AMS project's success to date can be attributed to the efforts of the AMS project team following Enterprise Life Cycle guidelines, developing required deliverables and work products, and completing the detailed project release designs on time. Another factor is the project team's formulation of a manageable scope and realistic completion dates for each release. The ability to secure sufficient funding for each release ensured the availability of adequate staffing. Finally, the project team actively used the Item Tracking Reporting and Control system to document and resolve risks and issues identified as having the potential to negatively affect the project's schedule.



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

## **Appendix I**

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

The overall objective of this review was to determine whether AMS project management and development activities are effective in providing a sound basis for the delivery and deployment of AMS releases.<sup>1</sup> This review was part of our Fiscal Year 2007 audit plan for reviews of the IRS Business Systems Modernization efforts.

To accomplish our objective, we identified the internal control systems used as guidance for the AMS project's development in the Enterprise Life Cycle.<sup>2</sup> We assessed the adequacy of the project team's development activities in relation to this guidance. We also assessed the adequacy of the AMS project's development and program plans by reviewing Business Systems Modernization Program project documentation and data provided by the IRS. Further, we conducted interviews of personnel in the Applications Development and Enterprise Services organizations. To accomplish the objective, we:

- I. Assessed the AMS project team's efforts to implement and use foundational project management processes and activities.
  - A. Determined the adequacy of the project team's contracting activities.
  - B. Assessed efforts to adequately staff the project to accomplish required AMS activities.
  - C. Determined the adequacy of requirements management activities for the AMS project.
  - D. Determined the adequacy of configuration management activities for the AMS project.
  - E. Determined the adequacy of the project team's efforts to manage project quality, track performance, and report activities.
  - F. Determined the adequacy of the project team's efforts to manage risks.
- II. Assessed the AMS project team's efforts to ensure the timely delivery of essential AMS release components to support the CADE address change and notice issuance capabilities.
- III. Assessed the AMS project team's efforts to deliver capabilities for the CADE to electronically update taxpayer accounts.

---

<sup>1</sup> See Appendix V for a Glossary of Terms.

<sup>2</sup> Appendix IV presents an overview of the Enterprise Life Cycle.



*The Account Management Services Project  
Is Meeting Its Development Goals*

---

- A. Determined the ability of the Enterprise Architecture Integration Broker infrastructure to provide effective data processing between the AMS, the CADE, and the current processing environment systems.
- B. Determined the ability of the Enterprise Architecture Integration Broker service to effectively update taxpayer addresses between the CADE and the current processing environment.
- C. Determined whether the initial *Documentum* framework for document management (an inventory component) will be in place to support future release image storage and image retrieval.
- D. Determined whether the AMS, using the commercial off-the-shelf product *xPression*, will enable the CADE to support and manage taxpayer accounts requiring generation of notices.





*The Account Management Services Project  
Is Meeting Its Development Goals*

---

**Appendix II**

*Major Contributors to This Report*

Margaret E. Begg, Assistant Inspector General for Audit (Information Systems Programs)  
Gary V. Hinkle, Director  
Edward A. Neuwirth, Audit Manager  
Bruce Polidori, Senior Auditor  
Tina Wong, Senior Auditor  
Louis V. Zullo, Senior Auditor



---

*The Account Management Services Project  
Is Meeting Its Development Goals*

---

**Appendix III**

*Report Distribution List*

Acting Commissioner C  
Office of the Commissioner – Attn: Acting Chief of Staff C  
Deputy Commissioner for Operations Support OS  
Associate Chief Information Officer, Applications Development OS:CIO:AD  
Associate Chief Information Officer, Enterprise Services OS:CIO:ES  
Deputy Associate Chief Information Officer, Applications Development OS:CIO:AD  
Deputy Associate Chief Information Officer, Business Integration OS:CIO:ES:BI  
Deputy Associate Chief Information Officer, Systems Integration OS:CIO:ES:SI  
Director, Procurement OS:A:P  
Director, Stakeholder Management OS:CIO:SM  
Director, Test, Assurance, and Documentation OS:CIO:AD:TAD  
Chief Counsel CC  
National Taxpayer Advocate TA  
Director, Office of Legislative Affairs CL:LA  
Director, Office of Program Evaluation and Risk Analysis RAS:O  
Office of Internal Control OS:CFO:CPIC:IC  
Audit Liaisons:  
    Associate Chief Information Officer, Applications Development OS:CIO:AD  
    Director, Program Oversight OS:CIO:SM:PO



*The Account Management Services Project  
Is Meeting Its Development Goals*

---

## **Appendix IV**

### *Enterprise Life Cycle Overview*

The Enterprise Life Cycle<sup>1</sup> is the IRS' standard approach to business change and information systems initiatives. It is a collection of program and project management best practices designed to manage business change in a successful and repeatable manner. The Enterprise Life Cycle addresses large and small projects developed internally and by contractors.

The Enterprise Life Cycle includes such requirements as:

- Development of and conformance to an enterprise architecture.
- Improving business processes prior to automation.
- Use of prototyping and commercial software, where possible.
- Obtaining early benefit by implementing solutions in multiple releases.
- Financial justification, budgeting, and reporting of project status.

In addition, the Enterprise Life Cycle improves the IRS' ability to manage changes to the enterprise; estimate the cost of changes; and engineer, develop, and maintain systems effectively. Figure 1 provides an overview of the layers, paths, phases, and milestones (shown as "MS" in Figure 1) within the Enterprise Life Cycle Framework.

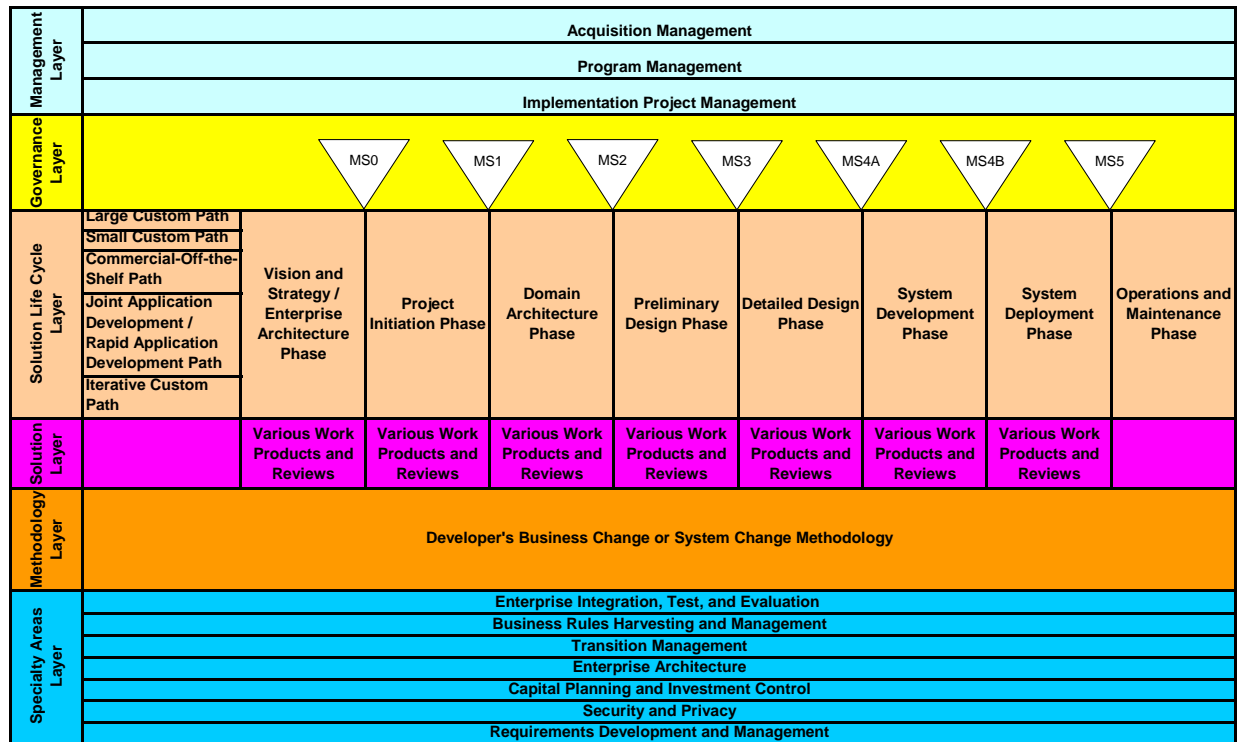
---

<sup>1</sup> See Appendix V for a Glossary of Terms.



*The Account Management Services Project  
Is Meeting Its Development Goals*

**Figure 1: Enterprise Life Cycle Framework**



Source: Graphical representation of the Enterprise Life Cycle Framework modified from the Enterprise Life Cycle Guide.

## Enterprise Life Cycle Layers

The Enterprise Life Cycle is a framework for organizing and using IRS directives, processes, procedures, templates, and standards to accomplish business change. It is organized as a set of six interacting layers.

- The **Management Layer** specifies how to plan and control business change programs, projects, acquisitions, and solutions throughout the Enterprise Life Cycle.
- The **Governance Layer** specifies additional controls imposed from outside the project or program.
- The **Solution Life Cycle Layer** specifies what should be done, but not how to do it.
- The **Solution Layer** manages the solution as it is produced, including providing standards for consistent solution specification and formal review of solution content. This Layer provides control over work products that may be produced by multiple internal and external developers using differing methodologies.



---

## *The Account Management Services Project Is Meeting Its Development Goals*

---

- The **Methodology Layer** details how to do the work and specifies a unique set of work products to be produced. Specific methodologies are not part of the Enterprise Life Cycle Framework.
- The **Specialty Areas Layer** provides additional guidance for areas of particular importance within the IRS. These areas include Enterprise Integration, Test, and Evaluation; Business Rules Harvesting and Management; Transition Management; Enterprise Architecture; Capital Planning and Investment Control; Security and Privacy; and Requirements Development and Management.

### ***Enterprise Life Cycle Paths***

A path specifies a unique “philosophy” or orientation for performing the work. Although the Enterprise Life Cycle specifies a standard for the work required to produce and operate business change solutions, there are multiple ways to approach and accomplish the required work. Paths are like alternate roads, each of which crosses different terrain, but all of which lead to the same destination. The Enterprise Life Cycle provides five distinct paths or approaches to developing systems:

- The **Large Custom Path** is for large projects.
- The **Small Custom Path** is for small projects.
- The **Commercial-Off-the-Shelf Path** is a commercial software-based approach.
- The **Joint Application Development/Rapid Application Development Path** is a highly accelerated, prototyping-based approach for very small, standalone solutions or solution components.
- The **Iterative Custom Path** is a hybrid approach that combines elements of the other approaches.

### ***Enterprise Life Cycle Phases and Milestones***

A phase is a broad segment of work encompassing activities of similar scope, nature, and detail and providing a natural breakpoint in the life cycle. Each phase begins with a kickoff meeting and ends with an executive management decision point (called a milestone) at which IRS executives make “go/no-go” decisions for continuation of a project. Project funding decisions are often associated with milestones.



*The Account Management Services Project  
Is Meeting Its Development Goals*

**Figure 2: Enterprise Life Cycle Phases and Milestones**

Phase	General Nature of Work	Concluding Milestone
Vision and Strategy/ Enterprise Architecture Phase	High-level direction setting. This is the only phase for enterprise planning projects.	0
Project Initiation Phase	Startup of development projects.	1
Domain Architecture Phase	Specification of the operating concept, requirements, and structure of the solution.	2
Preliminary Design Phase	Preliminary design of all solution components.	3
Detailed Design Phase	Detailed design of solution components.	4A
System Development Phase	Coding, integration, testing, and certification of solutions.	4B
System Deployment Phase	Expanding availability of the solution to all target users. This is usually the last phase for development projects.	5
Operations and Maintenance Phase	Ongoing management of operational systems.	System Retirement

Source: *The Enterprise Life Cycle Guide*.



*The Account Management Services Project  
Is Meeting Its Development Goals*

**Appendix V**

*Glossary of Terms*

<b>Term</b>	<b>Definition</b>
Business Rule	A statement that defines or constrains some aspect of the business.
Business Rules Harvesting	A general term used to broadly describe the entire set of activities involved in gathering, formalizing, analyzing, and validating business rules for a particular scope.
Customer Account Data Engine	Consists of databases and related applications that will replace the IRS' official repository of taxpayer information (the Master File) and provide the foundation for managing taxpayer accounts to achieve the IRS modernization vision.
Customer Service Executive Steering Committee	Has the responsibility for ensuring the successful implementation and integration of modernization projects and related program activities within its portfolio by overseeing investments, including validating major investment business requirements and ensuring that enabling technologies are defined, developed, and implemented.
Desktop Integration	Provides integrated access to multiple systems using only 1 computer terminal and supports over 30,000 end-users.
Enterprise Application Integration Broker	A commercial off-the-shelf solution that will be used to enable the communication and data transformations between components of the AMS, the current processing environment, and the CADE.
Enterprise Life Cycle	A structured business systems development method that requires the preparation of specific work products during different phases of the development process.
Information Technology Modernization Vision and Strategy	Establishes a 5-year plan that drives investment decisions; addresses the priorities around modernizing front-line tax administration and supporting technical capabilities; and leverages existing systems (where possible) and new development (where necessary) to optimize capacity, manage program costs, and deliver business value on a more incremental and frequent basis.



*The Account Management Services Project  
Is Meeting Its Development Goals*

<b>Term</b>	<b>Definition</b>
Infrastructure	The fundamental structure of a system or organization. The basic, fundamental architecture of any system (electronic, mechanical, social, political, etc.) determines how it functions and how flexible it is to meet future requirements.
Integrated Data Retrieval System	An IRS mission-critical system consisting of databases and programs supporting IRS employees working active tax cases. It manages data retrieved from the Master File allowing IRS employees to take specific actions on taxpayer account issues, track status, and post updates back to the Master File.
Integrated Financial System	The IRS' administrative financial accounting system.
Item Tracking Reporting and Control System	An information system used to track and report on issues, risks, and action items in the modernization effort.
Legacy Systems	A mainframe or minicomputer information system that has been in existence for a long period of time.
Logical Design	Describes the functions required of a system; that is, what is to be done, not how it will be done. Logical design is concerned with the processes to be performed.
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.
Physical Design	Describes how the processing will be performed; for example, whether data are input by a person or read by a barcode reader, whether a file is electronic or print. Tools to represent the physical design include system flowcharts and structure charts.
Release	A specific edition of software.
Request Tracking System	A web-based application that allows IRS personnel to prepare, approve, fund, and track requests for the delivery of goods and services.
Requirements	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.
Task Order	An order for services planned against an established contract.





*The Account Management Services Project  
Is Meeting Its Development Goals*

**Appendix VI**

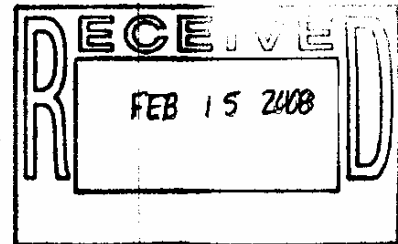
*Management's Response to the Draft Report*



CHIEF INFORMATION OFFICER

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

FEB 11 2008



MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM:

Arthur Gonzalez  
Chief Information Officer

SUBJECT:

Draft Audit Report – The Account Management Services Project Is Meeting Its Development Goals (Audit #200720004) (i-trak #2008-32580)

Thank you for the opportunity to review the subject draft audit report and to meet with the audit team to discuss earlier draft report observations. As a result of our discussions, we determined that the discussion draft normally used in the reporting phase of an audit would not be needed.

We appreciate your comments and observations that acknowledge our successful implementation of all aspects of the Enterprise Life Cycle and the Modernization and Information Technology Services organization project management processes through AMS Releases 1.1, 1.2A, and 1.2B. In particular, you recognized the Account Management Services Project Team's:

- Ability to successfully manage its requirements plan, to execute configuration management activities, and to effectively monitor the project schedule, cost, and quality performance
- Management of transition risks and issues for work products and deliverables that have met or are on schedule to meet project goals
- Coordinated efforts that helped ensure successful project development and the delivery of the Customer Account Data Engine capability to electronically update taxpayer accounts

We value your continued support and the assistance and guidance your team provides. If you have any questions, please contact me at (202) 622-6800 or Perry Robinett, Director of Program Oversight, at (202) 283-6283.