OFFICE OF
THE INSPECTOR GENERAL

SOCIAL SECURITY ADMINISTRATION

THE SOCIAL SECURITY ADMINISTRATION'S
TIME ALLOCATION SYSTEM

April 2011 **A-14-10-20122**

EVALUATION REPORT

Mission

By conducting independent and objective audits, evaluations and investigations, we inspire public confidence in the integrity and security of SSA's programs and operations and protect them against fraud, waste and abuse. We provide timely, useful and reliable information and advice to Administration officials, Congress and the public.

Authority

The Inspector General Act created independent audit and investigative units, called the Office of Inspector General (OIG). The mission of the OIG, as spelled out in the Act, is to:

- **Conduct and supervise independent and objective audits and investigations relating to agency programs and operations.**
- **Promote economy, effectiveness, and efficiency within the agency.**
- **Prevent and detect fraud, waste, and abuse in agency programs and operations.**
- **Review and make recommendations regarding existing and proposed legislation and regulations relating to agency programs and operations.**
- **Keep the agency head and the Congress fully and currently informed of problems in agency programs and operations.**

To ensure objectivity, the IG Act empowers the IG with:

- **Independence to determine what reviews to perform.**
- **Access to all information necessary for the reviews.**
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We strive for continual improvement in SSA's programs, operations and management by proactively seeking new ways to prevent and deter fraud, waste and abuse. We commit to integrity and excellence by supporting an environment that provides a valuable public service while encouraging employee development and retention and fostering diversity and innovation.

SOCIAL SECURITY

MEMORANDUM

Date: April 18, 2011 Refer To:

To: The Commissioner

From: Inspector General

Subject: The Social Security Administration's Time Allocation System (A-14-10-20122)

OBJECTIVE

The objectives of this evaluation were to determine (1) the events that led the Social Security Administration (SSA) to terminate the Time Allocation System (TAS) project and (2) whether SSA effectively managed the project.

BACKGROUND

On January 31, 2001,[1] SSA created a workgroup to develop and implement a unified system for measuring and distributing work hours among organizations and workloads that would be accurate, reliable, and cost-effective. The workgroup proposed TAS to replace the District Office Work Sampling (DOWS)[2] used in the Work Measurement System (WMS) for field office and teleservice center workloads. In SSA, the WMS provides employee workload information to component-level management. WMS provides management with the following information.

1. What employees are working on (workload/function).
2. How much work completed (volume).
3. How much time employees spend working (workpower).

In our report, *Cost Analysis System Background Report and Viability Assessment,*[3] we raised questions about the data submitted through DOWS to the Cost Analysis System

[1] *See* Appendix B for a chronological sequence of significant TAS events.

[2] DOWS is used to develop the amount of time expended on measurable and non-measurable work. DOWS data is collected via a random sampling technique and provides the relative share of time spent on each activity.

[3] SSA OIG, *Cost Analysis System Background Report and Viability Assessment*, (A-15-10-20149), April 2011.

(CAS). [4] For example, DOWS involves point-in-time work sampling techniques that were in place before the implementation of CAS in 1976. Further, this work sampling assumes that the level of effort, that is the total amount of time spent on each workload, relates to the number of responses per sample rather than actual time worked on each workload. Since CAS relies on DOWS to allocate costs to the Agency's trust, general, and other funds, it is imperative that whichever WMS (DOWS or TAS) is used to measure cost, the underlying methodology used to capture cost data must be valid.

TAS used a set of Agency-defined business rules to determine the amount of time employees spent on various workloads. In 2004, SSA contracted with DecisionPath Consulting[5] to provide management and engineering expertise to assist the Agency in developing and deploying TAS. DecisionPath Consulting was one of three contractors[6] engaged to consult on the TAS project.

In July 2009, SSA's Office of Quality Performance (OQP) issued a *Time Allocation System (TAS) Evaluation Report*. OQP stated its "…review identified many instances of differences between the observed activities and TAS reporting. TAS developers and subject matter experts should review these findings to determine which business rules to address, and which are operating as planned. We understand that some of the issues discussed in this report may have already been addressed by the experts."[7] To begin addressing OQP's findings, the Agency implemented maintenance releases to support the necessary changes to TAS.

In September 2009, SSA terminated the TAS project and reallocated resources to other projects. In 2006, SSA estimated accrued TAS costs for Fiscal Years (FY) 2004 and 2005 and future TAS costs through 2008 to be approximately $20 million. As of March 10, 2010, the total cost for all three contractors was $24.6 million. Further, SSA expended an additional $11.3 million on employee payroll, hardware/software, and travel costs. When SSA terminated the TAS project, the total project cost was $35.8 million.[8] See Appendix C for a detailed breakdown of the TAS project cost.

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[4] CAS carries out essential cost accounting functions for SSA. Some of these functions are (1) determining actual administrative costs chargeable to trust fund activities, general fund programs, and certain reimbursable programs and (2) developing a budget base of actual data on workloads, workyears, and costs (both direct and total workyears and costs) for use in projecting future resource requirements. (This function has been partially supplanted by alternate methods.)

[5] General Services Administration (GSA) Schedule Contract Number GS-35F-0300J and two SSA Blanket Purchase Agreements (BPA), SS00-06-40018 and SS00-04-40019.

[6] The other two contractors were Lockheed Martin and Ab Initio.

[7] SSA OQP, *Time Allocation System (TAS) Evaluation Report*, p.7, July 2009.

[8] The Chief Information Officer approved additional funds beyond the original estimate. These funds were used to expand the scope of the TAS initiative and support subsequent TAS releases.

To obtain a better understanding of SSA's information technology (IT) systems development lifecycle (SDLC) and its development of TAS, we reviewed relevant Federal laws, regulations, guidelines, standards, and Agency policies and procedures. We also reviewed internal SSA documents and interviewed Agency personnel knowledgeable of the TAS project. We conducted our evaluation in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspections*.[9] For more background information, scope and methodology, *see* Appendix D.

RESULTS OF REVIEW

We found several events that led to SSA's decision to terminate TAS. Some of these events raised questions about SSA's management of the TAS project, given that SSA terminated the project without proper analysis to determine which WMS (DOWS or TAS) more accurately accounted for workload time measurements. We believe if SSA had conducted sufficient project planning before initiating the TAS project, most, if not all, of the events identified in this report could have been resolved before expending approximately $36 million of Agency resources.

We have organized our report based on the SDLC used by SSA. The SDLC describes all of the business and software development activities and deliverables required for a software development project. The life cycle divides projects into four phases--Planning and Analysis, Construction, Post Release, and Maintenance. SDLC's goal is to establish a discipline and framework for developing software.

Described below are the specific events that led to TAS' termination and where these events occurred in SSA's SDLC for TAS.

Planning and Analysis Phase

- Insufficient Planning and Analysis Leading to the Termination of TAS
- TAS Benefits and Costs Were Not Identified Timely

Construction Phase

- Insufficient Testing Due to Storage Constraints

Post Release Phase

- No Post Implementation Review (PIR) after a system was in operation for 6 months, or after termination of TAS, to determine reasons for the project's failure.

[9] In January 2009, the President's Council on Integrity and Efficiency was superseded by the Council of the Inspectors General on Integrity and Efficiency, *Inspector General Reform Act of 2008*, Pub. L. No. 110-409 § 7, 5 U.S.C. App. 3 § 11. *See*, CIGIE, *Quality Standards for Inspection and Evaluation,* January 2011.

Maintenance Phase

- Inability to maintain TAS cost-effectively

PHASE 1—Planning and Analysis

According to Office of Management and Budget (OMB) Circular No. A-130, "Agencies must plan in an integrated manner for managing information throughout its life cycle. Agencies will . . . [c]onsider, at each stage of the information life cycle, the effects of decisions and actions on other stages of the life cycle, particularly those concerning information dissemination…."[10] Planning entails preparing, developing, or acquiring the information used to design the investment; assessing the benefits, risks, and risk-adjusted life cycle costs of alternative solutions; and establishing realistic costs, schedules, and performance goals for the selected alternative, before either proceeding to full acquisition of the capital project (investment) or useful segment or terminating the investment.[11]

SSA's Planning and Analysis Phase is the initial stage in the project life cycle during which the project team identifies and documents the system owner/users' goals and requirements, determines the project's feasibility, and develops the project plan. We have summarized two conditions that occurred in SSA's Planning and Analysis Phase that impacted TAS and possibly its termination. We summarize these events below.

We believe if SSA had conducted sufficient project planning before initiating the TAS project, most, if not all, of the events identified in this section of the report could have been resolved before expending approximately $36 million of Agency resources.

Insufficient Planning and Analysis Leading to the Termination of TAS

SSA management concluded, based on data analysis and on-site observation studies, that the TAS approach was not successful in meeting all of the Agency's management, accounting, and budgeting needs for reliable time measurement. SSA terminated the TAS project and continued to use the DOWS system without determining which of the work measurement systems more accurately accounted for and allocated costs to workloads.

Between March 2 and 13, 2009, OQP observed the activities of 10 field office and teleservice center employees for an entire pay period. OQP assigned two employees to watch each field office and teleservice employee and record, in an observation log, all activities the employee addressed during each day. Observers also documented whether the employee was on or off the system. OQP then loaded the TAS user day logs and observation logs, for March 2 through 13, 2009 into a database for analysis.

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[10] OMB Circular No. A-130, *Management of Federal Information Resources,* Section 8a(1).

[11] OMB Circular No. A-11, *Planning, Budgeting, Acquisition, and Management of Capital Assets*, Part 7, p. 5 of Section 300, November 2009.

In its 2009 study,[12] OQP reported that there were large differences between the time reported by observers and the time reported by TAS for DOWS workload categories 100 through 115 (*see* Appendix E for a list of DOWS workload categories). The large variances resulted from TAS' inability to identify specific activities not performed on a system. DOWS[13] required idle time and time an employee is logged off the system to be allocated to a specific workload, for example, lunch was DOWS category 100, and new staff training was DOWS category 101. TAS did not account for specific activities not performed on a system. TAS recorded idle time and time an employee is logged off the system as "unmeasured time." To address this issue, SSA created a TAS workgroup to address allocating the unmeasured time to specific workload activities.

The OQP study conveyed that experts had already addressed some of the issues discussed in the report. In addition, the study suggested TAS developers and subject matter experts review the reported time differences between the OQP-observed activities and TAS to determine which business rules needed to be addressed and which were operating as planned.

In FY 2010, SSA planned to run a parallel study of TAS and DOWS to explore and explain differences. However, SSA decided not to expend any additional funds, cancelled the parallel study, and terminated the TAS project.[14]

SSA was aware that variances would exist between TAS and DOWS time allocations. While the Agency attempted to validate the TAS time allocations to the OQP observations, the Agency did not try to validate the OQP time allocation observations data back to the DOWS time allocation data to determine which system (TAS or DOWS) was more accurate.

We interviewed staff from DecisionPath Consulting to obtain their perspective on some of the challenges associated with implementing the TAS project. According to DecisionPath Consulting management,

> . . . industrial engineering analysis made it clear that time allocation at SSA would be complex and was likely to yield different time allocations than the DOWS system had provided, which would require explanation to OMB [Office of Management and Budget]. The Associate Commissioner for the Office of Budget within what was then DCFAM [Deputy Commissioner for Finance, Assessment and Management] was well aware of the changes that would be required to leverage TAS data and approved of the TAS initiative.[15]

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[12] SSA OQP, *Time Allocation System (TAS) Evaluation Report*, p.6, July 2009.

[13] DOWS is the current manual sampling process for time measurement system of each workload category. SSA regards DOWS as statistically valid at the end of a FY.

[14] SSA, E-mail, from Linda McMahon, Deputy Commissioner for Operations to Michael Astrue, Commissioner of Social Security (September 21, 2009).

[15] SSA OIG, interview with DecisionPath Consulting, May 2010.

When we asked DecisionPath its view on why SSA terminated the TAS project, DecisionPath stated,

> Given resource constraints associated with the agency's budget processes, it was far easier to stick with the old and proven DOWS system despite its well-documented shortcomings, than to: (a) have to rework SSA's complicated spreadsheet-driven processes for budget formulation; and (b) have to explain the differences between DOWS-based time allocation and TAS-based allocations to OMB and potentially to Congress.[16]

In response to DecisionPath's statements, SSA's Office of Budget (OB) stated the use of TAS data would not require reworking SSA's budget formulation process. The TAS architecture supported a direct data feed to the CAS. [17] Additionally, OB stated,

> . . . OB did not at any time insist that there be consistency between DOWS and TAS. [OB] did however, recommend that the agency validate TAS. Multiple, costly time studies demonstrated that TAS could not be shown to be accurate on its own merits. TAS accuracy studies were not designed to compare TAS to DOWS, but instead were used to test whether TAS measurements accurately reflected the activities/actions that observers reported in detailed logs. The studies ultimately gave very little to no confidence that TAS accurately measured the work activities that it had been designed to measure. Without a study verifying the accuracy of TAS time measurements, we believe it would not have been in the best interest of SSA to convert to TAS.

The known deficiencies in DOWS and the challenges of implementing TAS presented a unique set of pros and cons for each system. SSA did not compare the two systems to determine which more accurately reflected Agency workloads ***before making*** the decision to discontinue the use of TAS.

Based on the information from DecisionPath and the Agency, it is clear that the differences in complex workloads as compared to DOWS complicated the TAS project. Given the intricate relationship between budget formulation, workload management and cost allocation, TAS, or any similar system, would need to be validated for accuracy before the system could be fully integrated into these processes. Nevertheless, SSA continues to use DOWS without knowing which time measurement system is more accurate. Therefore, we recommend SSA take the necessary steps to validate the accuracy of the current work measurement system or future replacements.

TAS Benefits and Costs Were Not Identified Timely

According to OMB Circular No. A-94, "Benefit-cost analysis (BCA) is recommended as the technique to use in a formal economic analysis of government programs or

[16] *Id*.

[17] CAS carries out essential cost accounting functions for SSA.

projects."[18] SSA did not identify TAS costs and benefits timely. The development of TAS began in 2003; however, a BCA was not prepared until 2006. A BCA is a systematic approach to evaluating the worth of a proposed project or initiative relative to the costs of achieving it. The analysis is used to examine and compare the costs, benefits, and uncertainties of each alternative to determine the most cost-beneficial means of meeting the objectives. The benefits could include cost avoidance savings.

The Agency identified and documented its complex business rules during the User Requirements step in the Planning and Analysis Phase. Some business rules, such as policies dictated by law, are identified and documented early in the development process. Other business rules are identified and documented when specific user tasks are performed, for example, calculations of various processing cycles (total time to close cases, etc.).

The Agency's business rules are the laws, regulations, standards, and procedures that define or constrain some aspect of SSA's business. A business rule can contain

- fact (true statement),
- constraint (action restriction),
- action enabler (trigger activity),
- inference (new fact), or
- computation (algorithm).

SSA did not anticipate the time and effort required to identify, document, and maintain its business rules (both those required by law and the workload allocation rules the Agency chose to implement). [19] Although the business rules are documented in the Planning and Analysis phase, the cost of maintaining these rules (which is a part of any cost-benefit analysis) should have been documented as well (see Maintenance phase for more information on the maintenance costs). When laws, regulations, policies, or procedures changed, SSA's business rules, systems, and applications changed. SSA needed to revisit any previously documented business rules for TAS to ensure completeness.

Prior to TAS' release into production, SSA did not prepare a BCA. Therefore, SSA underestimated the cost, time, and effort required to manage changes in its business rules that it established to allocate cost in the TAS.[20] Moreover, OMB Circular No. A-130 states, an Agency should ". . . prepare and update a BCA for each

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[18] OMB Circular No. A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs,* Section 5, October 1992.

[19] The Agency was unable to provide TAS maintenance costs.

[20] Production system is a fully documented, tested, and functional system delivered to the user community.

information system throughout its life cycle. A BCA will provide a level of detail proportionate to the size of the investment, rely on systematic measures of mission performance, and be consistent with the methodology described in OMB Circular No. A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."*[21,22] According to SSA's BCA, the goal of TAS was to develop and implement an integrated TAS that allocates work-time information consistently, for all components and workload activities, that reduces or eliminates manual time reporting systems, and that provides accurate data at the lowest level possible. As a result of insufficient planning and analysis, the Agency cannot demonstrate it achieved this goal. We recommend SSA prepare a BCA before developing future complex IT projects. In addition, we recommend SSA perform more comprehensive integrated strategic planning and analysis before starting the Construction phase of future complex IT projects.

PHASE 2—Construction Phase

This phase is a period in the project/product life cycle where a product is created from the requirements and design specifications.

SSA's inability to test and implement business rule changes affected the TAS project in its early stages. When a business rule was updated, the Agency could not test and implement the change within a reasonable amount of time because of storage constraints. Data storage capacity was not sufficient to store all raw data. Therefore, in the early stages of the TAS development, it was not possible to rework results for any extended period to test the impact of business rule changes. In later stages of the TAS project, SSA established a testing environment with enough storage to allow for reworking transactions. However, had the Agency been able to rework results sooner, the TAS workgroup would have known earlier that the data captured were insufficient. Now that capacity is no longer an issue, the Agency should ensure that testing is done before migrating IT projects into production.

PHASE 3—Post Release Phase

This segment of the life cycle occurs immediately after the software application is migrated into a production environment.[23]

OMB Circular No. A-130 requires that Federal agencies "…[c]onduct post-implementation reviews of information systems and information resources management processes to validate estimated benefits and costs, and document effective

[21] OMB Circular No. A-130, *Management of Federal Information Resources,* Section 8b(1)(b)(vi).

[22] The goal of OMB Circular No. A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs,* is to promote efficient resource allocation through well-informed decisionmaking by the Government. It provides general guidance for conducting BCA-cost and cost-effectiveness analysis.

[23] *See* Footnote 20.

management practices for broader use…."[24] In addition, OMB recommended that agencies consider various factors when conducting a post-implementation review, including strategic and mission impact and effectiveness; customer and user satisfaction; investment performance; and evaluations of accuracy, timeliness, and quality of project information.[25]

OMB further states,

> The Post Implementation Review (PIR) usually occurs either after a system has been in operation for about six months or immediately following investment termination. The review should provide a baseline to decide whether to continue the system without adjustment, to modify the system to improve performance or, if necessary, to consider alternatives to the implemented system. As a minimum, a PIR team should evaluate stakeholder and customer/user satisfaction with the end product, mission/program impact, and technical capability, as well as provide decision-makers with lessons learned so they can improve investment decision-making processes.[26]

Further, Federal agencies are required to effectively manage their capital assets to ensure scarce resources are spent wisely. SSA has a process called Post Release Review (PRR),[27] for validating a project's technical requirements, functionality, and customer satisfaction. SSA's PRR is not the same as conducting a PIR. Based on prior OIG recommendations,[28] the Agency agreed to implement PIRs in its policies and procedures for managing IT projects. One of the first steps SSA took was to develop a PIR Framework. In June 2010, we issued a report that stated SSA's PIR Framework needed to be enhanced to include conducting PIRs for terminated projects.[29] Based on the circumstances surrounding the TAS project, we believe this is a prime example of a terminated project that should have undergone a PIR. A PIR evaluates how effectively an IT project meets Agency goals and identifies reasons for project failures. Further,

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[24] OMB Circular No. A-130, *Management of Federal Information Resources*, Section 8b(1)(d)(i).

[25] OMB, *Capital Programming Guide, Version 2.0*, Supplement to OMB Circular No. A-11, Part 7: *Planning, Budgeting, and Acquisition of Capital Assets*, pp. 58 and 59, June 2006.

[26] OMB, *Capital Programming Guide, Version 2.0*, Supplement to OMB Circular No. A-11, Part 7: *Planning, Budgeting, and Acquisition of Capital Assets*, p. 60, June 2006.

[27] PRR is a planned review conducted with the customer, designated representatives, and other appropriate stakeholders after system implementation (typically 90 days after the system has been implemented to allow a period of real-time operation). The data collected from the PRR provide information regarding a project's success delivering what was promised in the Project Scope Agreement, and is used to assess customer satisfaction.

[28] SSA OIG*, Social Security Administration's Management of Information Technology Projects (*A-14-07-17099), July 26, 2007.

[29] SSA OIG, *Quick Response Evaluation, The Social Security Administration's Post-Implementation Review* (A-14-10-30105), June 22, 2010.

PIRs are important to ensure continuous improvement in SSA's IT investment decisions and management processes and help avoid repeating mistakes in future IT projects.

PIRs can be conducted at various intervals/releases of IT projects. For example, when the Agency migrated various releases of TAS into production, it could have conducted a PIR to determine the current releases' success or termination. Had SSA performed a PIR, the Agency may have identified issues or acquired information that could have resulted in a more timely decision to proceed or terminate the TAS project without expending additional resources. We recommend SSA conduct a PIR after a system has been in operation for 6 months and for all terminated projects to determine reasons for the project's failure.

PHASE 4—Maintenance Phase

Maintenance pertains to the activities required to keep a software and/or hardware system operational after implementation. Maintenance activities include continuing operational status, correcting faults, improving performance, troubleshooting for users, or adapting to a changed environment. SSA had difficulty maintaining TAS. The Agency identified approximately 30,000 business rules for TAS. When technology or a business process changed, a TAS business rule needed modification. SSA management stated that extensive time and monetary commitments were necessary to maintain TAS.[30] In addition, the Agency would need additional staff dedicated to maintaining TAS.

Further, SSA staff required specialized knowledge and skills to maintain TAS. The retention and hiring of these individuals had cost implications. According to SSA, TAS would require both Systems and Operations support. From a Systems perspective, the Agency would have to stay current on all data sources. For example, if a system added or changed screens, the Agency would have to capture the changes. From an Operations perspective, the Agency would require subject matter experts to help define the correct business rules and support user acceptance testing. Therefore, because of concerns about TAS' labor-intensive maintenance, the Agency was unable to justify the costs associated with TAS and discontinued efforts to develop it.

[30] We requested specific cost information for TAS maintenance, and, to date, the Agency has not provided this information.

TECHNOLOGICAL INNOVATIONS ACQUIRED THROUGH THE DEVELOPMENT OF TAS

Although SSA terminated the TAS project, the Agency stated that it was the catalyst for many innovations in SSA. The Agency continues to use processes developed as a part of TAS in its current IT projects. The primary advancement was the development, integration, and implementation of an Enterprise Extract, Transform, and Load (ETL) Architecture.[31] The introduction of ETL into SSA's Business Intelligence Architecture[32] enabled many Agency components to benefit from managing and processing massive amounts of data. Additionally, the lessons learned from the development of TAS provided insight into the complex business processes supported throughout the Agency. This micro-view of the Agency's business processes provided data analysts a perspective that could be used in future projects.

CONCLUSION AND RECOMMENDATIONS

Although SSA considered TAS a new and innovative approach to time measurement, the Agency could not demonstrate that it achieved its goal to provide accurate, timely, and relevant information for workload management, while expending $36 million on the TAS initiative. The Agency decided to terminate the TAS project without expending additional resources to (1) resolve the time variances between TAS and the OQP observations, (2) update and maintain TAS when business rules changed, and (3) determine which system (TAS or DOWS) more accurately reflected workloads. According to SSA's contractor, DecisionPath, it was easier for SSA to abandon the TAS project and keep using DOWS as its time measurement system. We believe if SSA had conducted sufficient project planning before initiating the TAS project, most, if not all, of the events identified in this report could have been resolved before expending approximately $36 million of Agency resources. Given the intricate relationship between budget formulation, workload management and cost allocation, TAS, DOWS or any similar system, should be validated for accuracy to ensure the Agency is using data that most accurately reflect the Agency's workloads.

Based on the information obtained during this review, we have identified opportunities for SSA to improve its systems implementation process. From an overall perspective, we recommend that:

1. SSA take the necessary steps to validate the accuracy of the current work measurement system or future replacements.

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[31] According to the statement of work for Ab Initio's ETL tool, SUMS/MCAS required an ETL solution as an essential and required technology for integrating data from multiple heterogeneous sources into designated Operational Data Stores and data warehousing systems.

[32] Business Intelligence Architecture is a set of concepts and methods to improve business decisionmaking by using centralized fact-based support systems. Business Intelligence produces information that is trusted, timely, relevant, easy to use, and in context.

With respect to the management of TAS or any future IT projects, we recommend the Agency:

2. Perform comprehensive integrated strategic planning and analysis before starting the Construction phase of complex IT projects.
3. Prepare a BCA before developing complex IT projects.
4. Conduct sufficient testing before migrating IT projects into production.
5. Perform a PIR after a system has been in operation for 6 months and for all terminated projects to determine reasons for the project's termination.

AGENCY COMMENTS AND OIG RESPONSE

SSA generally agreed with our recommendations. For Recommendations 1, 4, and 5, the Agency agreed. For Recommendations 2 and 3, the Agency stated that our recommended action is already in practice. See Appendix F for the full text of SSA's comments.

For Recommendations 2 and 3, we will continue to monitor the Agency's process for developing complex IT projects. We also received technical comments from the Agency. We incorporated these comments, where appropriate.

Patrick P. O'Carroll, Jr.

Appendices

Acronyms

BCA	Benefit-Cost Analysis
BPA	Blanket Purchase Agreement
CAS	Cost Analysis System
CICS	Customer Information Control System
DCBFM	Deputy Commissioner for Budget, Finance and Management
DCFAM	Deputy Commissioner for Finance, Assessment and Management
DCO	Deputy Commissioner for Operations
DCS	Deputy Commissioner for Systems
DOWS	District Office Work Sampling
ETL	Extract, Transform, Load
FY	Fiscal Year
GSA	General Services Administration
IT	Information Technology
MI	Management Information
OB	Office of Budget
OMB	Office of Management and Budget
OQP	Office of Quality Performance
PIR	Post Implementation Review
PRIDE	Project Resource Guide
PRR	Post Release Review
SDLC	Systems Development Lifecycle
SSA	Social Security Administration
SUMS/ MCAS	Social Security Unified Measurement System/Managerial Cost Accountability System
TAS	Time Allocation System
WMS	Work Measurement System

Time Allocation System Chronology of Significant Events

Date	Event
1998	Discussions began about the need for a Time Allocation System (TAS).
January 2001	TAS workgroup created.
March 2003	TAS vision and scope completed.
January 2004	Prototypes presented.
March 2004	Business requirements and time measurement alternatives completed.
May 2005	Systems analysis and design completed.
January 2006	Release 1.0 - Milestone release to capture workpower for the field office components.
October 2006	Release 1.5 - Milestone release to capture workpower for the teleservice center and Immediate Claims Taking Unit.
June 2007	Release 2.0 - Milestone release to enhance business rules with the help of subject matter experts.
July – August 2007	Maintenance Releases 1-2.
August 2007	TAS Rollout Release - Add regional and field office managers to the Business Intelligence Gateway (Automated Group Management Combined Release).
August 2007	Release 2.1 - Milestone release to provide 508 functionality (Maintenance Release 4).
September 2007	Maintenance Release 5.
September 2007	Release 2.2 - Milestone release to capture Training Workpower data.
November 2007	TAS Rollout - Denver/Seattle, 10 percent Offices.
November 2007	Maintenance Release 6.
December 2007	TAS Rollout - Chicago/Kansas City, 10 percent Offices.
December 2007 – January 2008	Maintenance Releases 7-8.
January 2008	TAS National Rollout - All Field and Regional Offices.
February 2008 – October 2009	Maintenance Releases 9-24 (including miscellaneous release on February 1, 2008).
July 2009	Office of Quality Performance issues *Time Allocation System Evaluation Report.*
September 2009	Deputy Commissioner for Operations sends an email to SSA's Commissioner notifying him of the decision to terminate TAS.
December 2009	Complete TAS Shutdown.

Total Cost of Time Allocation System

The Time Allocation System (TAS) project costs comprise contractor costs, Social Security Administration employee payroll costs, software/hardware costs, and travel-related cost. The table below details TAS costs as of March 2010.

Description	Cost	Total Cost
Contractor Costs		
DecisionPath Consulting	$22,780,628	
Lockheed Martin	1,426,521	
Ab Initio Consulting	381,634	
Total Contract Dollars Spent		$24,588,783
SSA Employee Costs		
Deputy Commissioner for Systems (DCS) personnel	$3,573,905	
Non-DCS personnel	2,102,288[1]	
Total SSA Employee Cost		$5,676,193
Procurement Costs		
Software	$4,636,678	
Hardware	792,072	
Total Procurement Cost		$5,428,750
Travel Costs		$152,150[2]
Total Cost of TAS (as of March 2010)		$35,845,876[3]

[1] We were unable to verify the accuracy of this amount with the Agency.

[2] *Id.*

[3] This amount is the cost that has been attributed to TAS as of March 2010. The Agency did not provide estimated costs to support continuous and ongoing time allocation architecture.

Background, Scope, and Methodology

The Social Security Administration's Systems Development Lifecycle

Office of Management and Budget (OMB) Circular No. A-130, *Management of Federal Information Resources,* defines the information system life cycle as the stages through which an information system passes, typically characterized as initiation, development, operation, and termination.[36]

SSA's systems development lifecycle (SDLC) methodology is documented in its Project Resource Guide (PRIDE). PRIDE applies to all systems projects that influence the Agency's core business functions or supporting information technology (IT) infrastructure, including the ability to develop, deliver, and maintain SSA's enterprise software or data.[37] Project teams must follow the appropriate SSA-approved life cycle model.[38] The Agency's SDLC generally follows the structure defined by OMB; SSA used this SDLC for TAS.

Scope and Methodology

To accomplish our objectives, we:

- Reviewed the *Clinger-Cohen Act of 1996*[39] as well as OMB Circular No. A-11, *Preparation, Submission, and Execution of the Budget*, and A-130, *Management of Federal Information Resources*.
- Reviewed applicable SSA policies and procedures.
- Reviewed the General Services Administration Schedule Contract Number GS-35F-0300J and two SSA Blanket Purchase Agreements (BPA) for DecisionPath Consulting, SS00-06-40018 and SS00-04-40019.
- Reviewed the SSA BPA with Lockheed Martin (SS00-05-60011) and the BPA with Ab Initio (SS00-05-40031).
- Reviewed SSA's Contracting Officer's Technical Representative status reports and supporting documentation.
- Interviewed SSA personnel from the Offices of the Deputy Commissioners of Systems (DCS), Operations (DCO), and Budget, Finance and Management (DCBFM).

[36] OMB Circular No. A-130, *Management of Federal Information Resources*, Section 6r.

[37] SSA, *Office of Systems Project Management Directive*, p. 1, para. 2 April 2010.

[38] SSA, *Office of Systems Project Management Directive*, p. 2, para. 6A April 2010.

[39] Pub. L. No. 104-106, Division E, Sec. 5113(b)(2)(A).

- Interviewed DecisionPath Consulting staff.

We performed our evaluation between March and June 2010 in Baltimore, Maryland. The entities reviewed were the Offices of the DCS, DCO, and DCBFM. We conducted our evaluation in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspections*.[40]

[40] In January 2009, the President's Council on Integrity and Efficiency was superseded by the Council of the Inspectors General on Integrity and Efficiency, *Inspector General Reform Act of 2008*, Pub. L. No. 110-409 § 7, 5 U.S.C. App. 3 § 11.

District Office Work Sampling Workload Categories

Workload Categories	Titles
(1)	Retirement Claims
(2)	RSI Nondisabled Dependent Claims
(3)	RSDHI Prisoner Actions
(4)	Disability Insurance Claims
(5)	DI Nondisabled Dependent Claims
(6)	RSDI Rep Payee Accountings
(7)	SSI Rep Payee Accountings
(8)	SSI Aged Applications
(9)	SSI Prisoner Actions
(10)	SSI Disability/Blindness Applications
(11)	SSI Redeterminations -- Limited Issues
(12)	SSI Medical CDR
(13)	RSDI Earnings Enforcement
(15)	RSDI Change of Payee
(16)	RSDI Medical CDR
(17)	RSDI Work CDR
(18)	Health Insurance Workloads
(19)	Supplementary Medical Insurance Workloads
(20)	Assistance Requests
(21)	RSDHI Reconsideration/Personal Conferences
(22)	SSI Hearings and Appeals
(23)	Earnings Disagreements/Earnings Discrepancies
(24)	SSI Change of Payee
(25)	SSI Appeals Effectuations
(26)	SSI Overpayment Decisions/Collections
(27)	RSDI Overpayment Decisions/Collections
(28)	SSI Redeterminations (Low, Middle and High Error Profile)
(29)	SSI Reconsiderations
(30)	Fraud
(31)	RSDHI Class Actions
(32)	SSI Class Actions
(33)	SSI Windfall Offset
(36)	RSDHI Hearings and Appeals Requests
(39)	Medicare Part D Subsidy Applications
(40)	Medicare Part D SCE Pre-Applications
(41)	Medicare Part D SCE Applications
(42)	Medicare Part D Subsidy Appeals
(43)	Medicare Part D Subsidy Redeterminations
(44)	Concurrent Disability Development
(45)	Medicare Part B IRMAA Events

(46) Medicare Part B IRMAA Appeals
(47) Special Disability Workload
(49) Medicare Reform Inquiries
(51) SSI Status Changes
(52) RSDI School Program
(53) Food Stamp Applications/Recertifications
(55) RSDI Immediate Payment
(56) SSI Immediate Payment
(57) RSDI Payments and Checks
(59) Benefit Verification Services
(60) RSDHI Status Changes
(61) RSDI Rep Payee Misuse
(62) SSI Rep Payee Misuse
(63) SSI Payments and Checks
(70) SSI PASS
(71) Title II DSI FEDRO Appeals
(72) Title XVI DSI FEDRO Appeals
(73) Title XVI Decision Review Board Reviews
(74) Title II Decision Review Board Reviews
(79) Social Security Numbers
(80) General Inquiries
(100) Lunch
(101) New Staff Training
(102) Ongoing/Special Program Training
(103) Information Services
(104) Administration and Management
(105) Travel
(106) Personal Time
(107) Reception
(108) Unclassified Clerical
(109) Leave
(110) Earnings Record Maintenance
(111) Quality Control and Security
(112) Labor-Management Relations
(113) Non-Tour Hours
(114) Impact of Building Operation and Lease Management
(115) Systems Support

Agency Comments

SOCIAL SECURITY

MEMORANDUM

Date: March 21, 2011 Refer To: S1J-3

To: Patrick P. O'Carroll, Jr.
Inspector General

From: Dean S. Landis /s/
Deputy Chief of Staff

Subject: Office of the Inspector General Draft Report, "The Social Security Administration's Time Allocation System" (A-14-10-20122)--INFORMATION

Thank you for the opportunity to review the draft report. Please see our attached comments.

Please let me know if we can be of further assistance. You may direct staff inquiries to Chris Molander at (410) 965-7401.

Attachment

COMMENTS ON THE OFFICE OF THE INSPECTOR GENERAL DRAFT REPORT, "THE SOCIAL SECURITY ADMINISTRATION'S TIME ALLOCATION SYSTEM" (A-14-10-20122)

We offer the following:

GENERAL COMMENTS

While we terminated the Time Allocation System (TAS), we have a sound history of successfully implementing our Information Technology (IT) projects. We utilize a rigorous life-cycle process for every project and employ many of the methods you describe in your recommendations. TAS was a creative, innovative effort to improve a decades-old process. We knew there would be risks, but the risks were acceptable considering the potential for substantial benefits. We did not halt the project because of insufficient strategic planning and analysis, nor a lack of testing. In fact, our analysis led us to conclude it was unwise to continue expending extraordinary amounts of resources on the project. We performed extensive studies and decided that TAS would not provide the reliable time measurement data needed to meet our management, accounting, and budgeting needs.

RESPONSES TO RECOMMENDATIONS

Recommendation 1

Take the necessary steps to validate the accuracy of the current work measurement system or future replacements.

Response

We agree. During the TAS effort, we identified some issues with the accuracy of our work sampling. We are addressing those issues and assessing our data collection methods. For example, we are considering systems options to support our sampling techniques.

Recommendation 2

Perform comprehensive integrated strategic planning and analysis before starting the Construction phase of complex IT projects.

Response

This is already our practice. We did extensive planning and analysis before starting the construction phase of the TAS project. We have large, complex programmatic workloads, and what we were attempting was bold and visionary. We conducted meticulous research, interviewed agency executives, considered strategic options, and held many briefings for agency executives and managers.

We consider this recommendation closed for tracking purposes.

Recommendation 3

Prepare a benefit-cost analysis (BCA) before developing complex IT projects.

Response

This is already our practice. As you note, we did not prepare a BCA for TAS until 2006. We delayed the BCA because we were acquiring information to estimate the costs of future TAS releases. Prior to 2006, we had developed some cost estimates, but we did not conduct a formal BCA. Nevertheless, from the start, we did have a good sense of the magnitude of the project.

We consider this recommendation closed for tracking purposes.

Recommendation 4

Conduct sufficient testing before migrating IT projects into production.

Response

We agree.

We did extensive testing for the TAS project. Unfortunately, the volume of data we needed to simulate a production environment in the testing, validation, and integration environments was not available in the early stages of the project.

Recommendation 5

Perform a Post Implementation Review (PIR) after a system has been in operation for 6 months and for all terminated projects to determine reasons for the project's termination.

Response

We agree. We are currently refining our PIR guidance.

OIG Contacts and Staff Acknowledgments

OIG Contacts

Brian Karpe, Director, Information Technology Audit Division

Mary Ellen Moyer, Audit Manager

Acknowledgments

In addition to those named above:

Charron Allen, Auditor

Cheryl Dailey, Auditor

For additional copies of this report, please visit our Website at www.socialsecurity.gov/oig or contact the Office of the Inspector General's Public Affairs Staff Assistant at (410) 965-4518. Refer to Common Identification Number A-14-10-20122.

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