IMPLEMENTATION OF QUICKTIME TIME AND ATTENDANCE SYSTEM

National Transportation Safety Board

Report Number: FI-2004-091
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September 27, 2004

The Honorable Ellen Engleman Conners
Chairman
National Transportation Safety Board
490 L'Enfant Plaza, SW
Washington, DC 20594

Dear Chairman Engleman Conners:

This report presents the results of our audit of the National Transportation Safety Board's (NTSB) implementation of the QuickTime time and attendance system (QuickTime) which is intended to address NTSB's Federal Managers' Financial Integrity Act (FMFIA) material weakness. NTSB is responsible for investigating accidents in all transportation modes to determine causes and recommend changes to improve safety and reduce the likelihood and consequences of future accidents. NTSB plays a critical role in ensuring a safe transportation system.   Of its approximately \$73 million in appropriations for fiscal year (FY) 2004, \$51 million (70 percent) was expended for salaries, fringe benefits, and performance awards for about 420 full-time employees.

Since 2001, NTSB has been updating its accounting systems and overall management controls to strengthen its management of financial resources.   In particular, NTSB has entered into cross-service agreements with the Department of the Interior's (DOI) National Business Center to use its Federal Financial System and other systems.   To date, NTSB uses DOI services to process acquisitions and procurements electronically, to maintain its personnel records and process its payroll, and to process employee travel requests and reimbursements.[1] This effort was in response to a January 2001 audit report, which disclosed internal control weaknesses related to the completeness and clarity of financial

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[1] The systems are, respectively, Interior Department Electronic Acquisition System—Procurement Desktop, Federal Personnel/Payroll System, and Travel Manager.

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policies, recording and reviewing of transactions, segregation of duties, and reporting on budget execution.[2]

The 2001 audit report also found that NTSB did not have a standard practice to document and report exception time (overtime and leave). For example, some offices captured and reported overtime and leave via e-mail while other offices used the standard Government leave form. NTSB also did not have a process to measure labor cost by project. Information about the cost of projects is important so managers have meaningful project-level cost data to make decisions and improve the efficiency of operations. The January 2001 report recommended that NTSB implement systems and procedures to correct these deficiencies.

As part of its continuous monitoring of the effectiveness of management controls associated with its programs, NTSB determined that labor costs, its single largest expense, needed greater control. Therefore, NTSB reported employee timekeeping verification and validation as a material weakness in its 2001 FMFIA report (dated January 3, 2002). At that time, NTSB expected to correct the problem in 2002. Although progress was made in some areas, in its December 2002 FMFIA report, NTSB stated that it expected to eliminate the time and attendance material weakness in 2003. NTSB identified QuickTime, developed by DOI, as the system it planned to use to correct the time and attendance material weakness. However, because DOI had higher priority work, NTSB experienced several delays in implementing QuickTime. In its December 2003 FMFIA report, NTSB stated that it anticipated deploying the QuickTime system in the fourth quarter of FY 2004.

Our audit objectives were to determine whether NTSB has (1) adequately prepared to implement the QuickTime time and attendance system, and (2) obtained reasonable assurance that internal controls are adequate to meet NTSB's requirements for operating the QuickTime time and attendance system. We conducted the audit in accordance with Government Auditing Standards. Our scope and methodology are described in Enclosure 1.

RESULTS IN BRIEF

NTSB has not yet taken important preparatory steps needed to successfully implement QuickTime. As a result, NTSB is not positioned to deploy QuickTime by its projected implementation deadline of the fourth quarter of FY 2004. Specifically, NTSB has not:

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[2] PricewaterhouseCoopers LLP report "Review of Internal Financial Controls and Assessment of Audit Readiness," January 12, 2001.

- Established an interagency agreement with DOI that specifies the services DOI will provide.

- Determined how QuickTime should be adapted to best meet NTSB's unique requirements (e.g., defining the coding structure to be used to identify extra hours worked during an accident investigation).

- Determined what changes NTSB will need to make to its organization and time and attendance processes to successfully implement QuickTime.

- Determined what policies and procedures need to be developed to provide reasonable assurance that internal controls will be adequate to reduce risks of fraud, waste, and abuse when operating QuickTime.

These actions are essential for NTSB to correct its longstanding material internal control weakness related to its time and attendance. NTSB has reported this same material weakness for the past 3 years. Prolonging the corrective action related to its time and attendance material weakness impairs NTSB's goal of improving its financial management practices. In addition, not correcting this material internal control weakness could lead to unreliable or inaccurate reporting of financial information and loss, misuse, or fraud related to employee time and attendance.

Three organizations must participate in implementing QuickTime: the Human Resources Division, the Office of Research and Engineering, and the Office of Chief Financial Officer (CFO). It is essential that NTSB assign responsibilities among the affected organizations and establish a project team to implement the system. Funding in NTSB's budget is a key measure of the priority given to a project. Because NTSB did not provide funds to implement QuickTime, NTSB has not assured that resources were available to achieve its goal of implementing the system in FY 2004. NTSB also has not developed a formal plan with milestones needed to track the implementation of QuickTime. Such a plan would provide a detailed road map for the implementation of QuickTime.

To ensure timely and effective QuickTime implementation, we are making seven recommendations to the NTSB Managing Director that encompass assigning staff, providing funding, preparing a plan, and completing preparatory implementation steps. Responding to a draft of this report, the NTSB Chairman concurred with the recommendations. The actions planned by NTSB are reasonable and should correct the deficiencies cited in this report.

PRINCIPLE FINDINGS AND RECOMMENDATIONS

NTSB Is Not Prepared To Implement QuickTime

Although NTSB stated in its December 2003 FMFIA report to the President that it planned to correct its material weakness by implementing QuickTime in FY 2004, it has not been aggressive enough to resolve this issue in a timely and effective manner. In our opinion, NTSB is not positioned to deploy QuickTime by September 30, 2004. Specifically, NTSB:

Has not established an interagency agreement with DOI. Establishing an interagency agreement with DOI is a fundamental step in deploying QuickTime and correcting NTSB's time and attendance material weakness related to employee timekeeping verification and validation. An interagency agreement would, among other things, specify the services DOI will provide to NTSB, the responsibilities of each Agency in implementing the system, how information will be shared, how progress will be reported, and how disputes will be resolved. The interagency agreement should also address the cost of implementation and of continued support after implementation. The agreement will benefit both NTSB and DOI by ensuring that both Agencies have a common understanding of the services to be provided, the costs, and the roles and responsibilities of each Agency.

Has not adapted QuickTime to meet its unique requirements. Once an interagency agreement is established, NTSB will need to determine how the QuickTime system should be adapted to best meet its unique requirements. Because the system provides a number of options, NTSB must make choices. For example, NTSB needs to provide DOI with data unique to its operations so that DOI can customize QuickTime to allow use of hour codes, leave request codes, and extra hours codes. NTSB then needs to work with DOI in configuring the system to implement those options. NTSB also needs to provide basic employee information so DOI can build employee profiles in the system. NTSB has not yet done any of this.

Has not changed its organization and time and attendance processes. To successfully implement QuickTime, NTSB will need to determine what changes need to be made in its organization and time and attendance processes. We attended a DOI demonstration with NTSB officials of QuickTime capabilities. The demonstration indicated that QuickTime has the features needed to address NTSB's time and attendance material weakness. However, it also showed that implementing the system will require significant changes to NTSB's organization and time and attendance processes.

For example, because NTSB does not have a standard process for time and attendance, it will need to define the role of timekeepers, certifiers, and employees. It must also determine time and attendance rules such as the number of credit hours employees will be able to accumulate, how leave will be requested (automated or manual requests), whether an absence and overtime can be recorded on the same day (a unique NTSB requirement associated with accident investigations), and who will approve and certify time and attendance records.

In determining what changes are needed, NTSB must also consider whether changes will be required in its infrastructure to support QuickTime. Affected infrastructure areas could include NTSB's telecommunications networks, internet connections, or software. NTSB will also have to determine if any new equipment will be required.

Has not assessed its internal controls. NTSB has not yet determined what policies and procedures need to be developed to provide reasonable assurance that internal controls will be adequate to reduce risks of fraud, waste, and abuse when operating the QuickTime system. Currently NTSB does not have written policies and procedures for its time and attendance reporting. Written policies and procedures are a necessary control to provide guidance to NTSB managers, timekeepers, and employees who will be using the system to record their time. Inadequate internal controls could lead to unreliable or inaccurate reporting of financial information and loss, misuse, or fraud related to employee time and attendance.

The Government Accountability Office's (GAO) Internal Control Standard requires agencies to have a well-defined organizational structure and flow of time and attendance information. This organizational structure must include clearly written and communicated policies and procedures setting forth the responsibilities of employees, timekeepers, supervisors, and others regarding recording, examining, approving, and reporting time and attendance information.[3]

Management Attention Is Needed To Implement the System

NTSB's limited progress in implementing QuickTime can be attributed to the fact that it did not: (1) assign staff to implement the system, (2) provide funds to implement QuickTime in FY 2004, and (3) develop a formal plan with detailed tasks and milestones.

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[3] GAO Internal Control Standard GAO-03-352G, "Maintaining Effective Control Over Employee Time and Attendance Reporting," January 2003.

Assigning responsibilities and staff to implement the system. NTSB has not assigned staff to implement the system. Although individual managers have taken some steps to learn more about the system, responsible NTSB officials told us that NTSB has not moved aggressively to implement QuickTime because NTSB had other priorities and issues. These included dealing with an Office of Personnel Management audit of its Human Resources Division, installing other automated accounting and management systems, limiting the burden on staff related to implementing new systems, and finding a replacement labor relations specialist to interact with the Union.

Three NTSB organizations must participate in implementing QuickTime. The Human Resources Division is responsible for ensuring the accuracy of the time and attendance data. The Office of Research and Engineering has responsibility for ensuring that information systems are acquired and implemented in a cost-effective manner. Both of these organizations report to the NTSB Managing Director. Because the CFO is responsible for financial management issues, including the implementation of effective internal controls and the correction of material weaknesses, it is essential that the CFO actively participate in the project or provide oversight. The CFO, however, reports to the NTSB Chairman rather than the Managing Director.

NTSB can organize itself in a number of ways to complete this project; we are not advocating any specific organization. However, it is essential that NTSB assign responsibilities among the affected organizations and establish a project team to implement the system.

Funding the implementation. Funding is a key indicator of priorities within any agency. NTSB estimated $33,319 initial set-up costs and $10,750 annual maintenance costs for implementation and operation of QuickTime. However, NTSB did not identify these costs in its FY 2004 budget request. NTSB officials told us that the costs of implementing QuickTime are not a barrier to implementation. The money can be made available from NTSB reserves since the costs of implementation are not considered high. It is good practice to include even low-cost items in the budget because that assures that attention is given to achieving Agency goals and objectives.

Developing a plan. A basic management tool to successfully implement any project is a plan with detailed tasks and milestones. It is essential that NTSB develop a formal plan that includes the detailed activities and tasks that must be performed to implement the system. Key activities that NTSB should incorporate into the plan include: (1) changes to its organization to accommodate QuickTime, (2) changes to the QuickTime system to fit NTSB's work environment, and

(3) activities associated with implementing QuickTime, such as developing test and acceptance procedures and providing training to NTSB staff.

CONCLUSION AND RECOMMENDATIONS

NTSB needs to establish a new date to implement QuickTime. To meet that date, it is important for NTSB to take a more aggressive posture in implementing the QuickTime system by assigning roles and responsibilities, identifying funds to implement the system, developing a plan for implementation, and completing the preparatory implementation steps. These actions are essential for NTSB to correct this longstanding material internal control weakness.

To ensure the timely and effective implementation of QuickTime, we recommend the NTSB Chairman direct the Managing Director and the CFO to:

(1) Clearly assign roles and responsibilities for implementing QuickTime, including the appropriate roles for the Human Resources Division, Office of Research and Engineering, and the Office of CFO.

(2) Allocate funds and dedicate staff specifically to implement QuickTime.

(3) Develop a formal plan with milestones for implementing QuickTime that identifies all tasks needed to successfully implement the system.

(4) Establish an interagency agreement with DOI for system implementation.

(5) Determine how the QuickTime system should be adapted to meet NTSB's unique needs.

(6) Determine what changes NTSB will need to make to its organization and time and attendance processes to successfully implement the QuickTime system.

(7) Establish a process to identify and implement necessary internal controls and related policies and procedures as part of implementing QuickTime.

NTSB COMMENTS AND OFFICE OF INSPECTOR GENERAL ANALYSIS

A draft of this report was provided to NTSB for comments on August 13, 2004. The NTSB Managing Director responded on September 17, 2004, and concurred with all recommendations (see Appendix). The actions planned by NTSB are reasonable and should correct the deficiencies cited in this report. We will continue monitoring progress implementing these recommendations.

In response to recommendation 1 to clearly assign roles and responsibilities for implementing QuickTime, a project team led by an Assistant Managing Director was assigned on August 24, 2004. NTSB concurred with recommendation 2 to allocate funds and dedicate staff specifically to implement QuickTime. NTSB agreed with recommendation 3 to develop a formal plan with milestones for implementing QuickTime and has directed the project team to develop a detailed implementation plan by the end of calendar year 2004. This plan will include milestones and the tasks to implement QuickTime. NTSB concurred with recommendation 4 to establish an interagency agreement with DOI for system implementation. Each year, the NTSB negotiates an interagency agreement with DOI for all of the various services that DOI will perform that year. NTSB will ensure that the FY 2005 agreement includes QuickTime. In response to recommendations 5, 6, and 7, NTSB stated that during the preparation of the detailed implementation plan, the project team will adjust NTSB business processes or work with DOI to adapt the software to meet needs not addressed by the baseline system.

We appreciate the courtesies and cooperation of the National Transportation Safety Board representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-1992 or Theodore Alves, Assistant Inspector General for Financial and Information Technology Audits, at (202) 366-1496.

Sincerely,

Alexis M. Stefani
Principal Assistant Inspector General
  for Auditing and Evaluation

Enclosures (2)

Enclosure 1. Scope and Methodology

As part of our oversight responsibility at NTSB, this audit was conducted to determine what progress NTSB has made in correcting its reported employee timekeeping verification and validation material weakness.

We reviewed the PricewaterhouseCooper LLP report dated January 12, 2001, and the GAO report dated September 28, 2001. Both addressed NTSB's internal control weaknesses. We also reviewed policies and procedures and interviewed NTSB financial and program managers.

We reviewed NTSB's annual FMFIA assessment report submitted to the President and Congress for 2001, 2002, and, 2003. We reviewed relevant laws and regulations related to correcting identified FMFIA material weaknesses. We also reviewed requirements to incorporate basic management controls in the guidance and procedures that govern NTSB programs and operations.

We contacted DOI National Business Center representatives to gain an understanding of the QuickTime system and its capabilities and also to determine what, if any, progress had been made on implementing the system at NTSB. We attended a demonstration of the QuickTime system presented by DOI.

We performed our audit work from March 2004 through June 2004 at NTSB headquarters in Washington, DC. The audit was conducted in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States and included such tests as we considered necessary to provide reasonable assurance of detecting abuse or illegal acts.

Enclosure 2. Major Contributors to This Report

The following individuals contributed to this report.

Name	Title
Alvin A. Brown	Program Director
Michael D. Richardson	Project Manager
Clarence Fujimoto	Senior Auditor
Kathleen Huycke	Editor

Appendix. Management Comments

National Transportation Safety Board

Washington, D.C. 20594

Office of the Managing Director

September 17, 2004

Theodore P. Alves
Assistant Inspector General for Financial
   and Information Technology Audits
Department of Transportation
400 7th Street S.W.
Washington, D.C. 20590

Dear Mr. Alves:

Thank you for the opportunity to provide comments on the draft report on our implementation of the QuickTime time and attendance system. We agree with the general conclusions and I am providing our specific comments on the recommendations contained in the report as an enclosure to this letter.

We are pleased that you have recognized a number of actions that we have taken to strengthen our management of financial resources including our continuous monitoring of the effectiveness of our management controls. As you know, we reported employee timekeeping verification and validation as a material weakness in our Federal Manager's Financial Integrity Act report, and we are looking forward to rectifying this weakness through the implementation of QuickTime.

If you have any questions, please contact David Mayer, Assistant Managing Director, at (202) 314-6318.

Sincerely,

Daniel D. Campbell
Managing Director

Enclosure

Recommendations and Responses Page 1

Recommendation 1

Clearly assign roles and responsibilities for implementing QuickTime including the appropriate roles and responsibilities for the Human Resources Division, Office of Research and Engineering, and the Office of the CFO.

Response: Concur. The project team was assigned on August 24, 2004. Led by an Assistant Managing Director, the team includes the Chief of the Human Resources Division, Director of the Office of Research and Engineering, and Chief Financial Officer. The team members have the experience and skills required to implement QuickTime.

Recommendation 2

Allocate funds and dedicate staff specifically to implement QuickTime.

Response: Concur. We will commit sufficient FY05 funds for the implementation, once funds are appropriated; however, we note implementing QuickTime has not been hampered by a lack of funding. Although it is not possible for a small agency to dedicate staff to a project of such as this, as noted in the draft report, the Safety Board has successfully handled critical, agency wide conversion projects such as migrating to new payroll and financial systems. These projects were successfully implemented using the approach we are using for QuickTime. The project team will have access to appropriate Safety Board staff as needed for the project, and we are prepared to augment the team with contractor-provided assistance, if it becomes necessary to do so.

Recommendation 3

Develop a formal plan with milestones for implementing QuickTime that identifies all tasks needed to successfully implement the system.

Response: Concur. The project team met on August 24, 2004. The team was directed to develop a detailed implementation plan by the end of calendar year 2004. This plan will include milestones and the tasks required to implement QuickTime.

Recommendation 4

Establish an interagency agreement with DOI for system implementation.

Response: Concur. Each year, the Safety Board negotiates an interagency agreement with DOI for all of the various services that DOI will perform for the Board that year. We will ensure that the Board's FY2005 interagency agreement with DOI includes QuickTime.

Recommendations 5

Determine how the QuickTime system should be adapted to meet NTSB's unique needs.

Response: Concur.   During the preparation of the detailed implementation plan, the NTSB implementation team will review the QuickTime software and, if necessary, adjust Safety Board business processes or work with DOI to adapt the software to meet needs not addressed by the baseline system.

Recommendation 6

Determine what changes NTSB will need to make to its organization and time and attendance processes to successfully implement the QuickTime system.

Response: Concur.   As noted above, during the preparation of the detailed implementation plan, the NTSB implementation team will review the QuickTime software and, if necessary, adjust Safety Board business processes or work with DOI to adapt the software to meet needs not addressed by the baseline system.

Recommendation 7

Establish a process to identify and implement necessary internal control and related policies and procedures as part of implementing QuickTime.

Response: Concur. As noted above, during the preparation of the detailed implementation plan, the NTSB implementation team will review the QuickTime software and, if necessary, adjust Safety Board business processes or work with DOI to adapt the software to meet needs not addressed by the baseline system.