Electronic Documents Program

July 25, 2007
Audit Report No. 428
MEMORANDUM

To: Corey Booth  
    Brian Cartwright  
    James Clarkson  
    Diego Ruiz  
    Jeff Risinger  
    Sharon Sheehan  
    Linda Thomsen  
    Peter Uhlmann  

From: Walter Stachnik  

Date: July 25, 2007  

Re: Electronic Documents Program (Audit no. 428)  

Attached is our audit report on Enforcement’s Electronic Documents Program. The report reflects the comments we received on prior drafts.

We would appreciate receiving any additional comments you have concerning this audit and the report. In particular, we would like to know whether you found the audit useful. We also welcome any suggestions from you concerning how we could improve future audits.

The courtesy and cooperation of you and your staff are greatly appreciated.

Attachment

Cc: Greg Cobert  
    Ken Hall  
    Dan Lisewski  
    Joan McKown  
    Darlene Pryor  
    David Sheldon  
    Carol Smith  
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    David Wiederkehr  
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EXECUTIVE SUMMARY

In April 2004, the Division of Enforcement (Enforcement) and the Office of Information Technology (OIT) began a program to image electronically Enforcement's evidentiary documents. We reviewed the program in 2004 (Document Imaging System, Audit Memorandum No. 38, issued September 13, 2004). That review identified several technical, quality control, and staffing issues. Commission management was aware of these issues and was working to correct them.

In this follow-up evaluation, we found that significant improvements have been made to the program to address the identified issues. Program users we surveyed were now generally satisfied with the imaging system. We commend Enforcement and OIT for their success in making improvements.

We are recommending several additional improvements to the program. These include: providing additional program guidance and user training; implementing additional monitoring of contractor performance; and ensuring that background investigations are appropriately completed for contract employees and that they sign non-disclosure agreements. Also, OIT and Enforcement should consider designating a task monitor or program manager.

Commission staff generally agreed with the report's recommendations.

OBJECTIVES, SCOPE AND METHODOLOGY

Our objectives were to determine what improvements have been made to the Electronic Documents program since our 2004 review, and to identify additional improvements. We focused on the processing of evidentiary documents for the Division of Enforcement, the primary program user.

We interviewed Commission staff, reviewed program guidance and other relevant documentation, and surveyed program users in Enforcement and the regional offices. The scope of our review included the coordination between contractors and contract administrators, the process for loading electronic and paper documents into

1 The term "document" refers to all evidentiary materials that the Commission receives, regardless of whether they are in paper, electronic media or other format.
the imaging system, quality assurance procedures, regional office issues, internal controls over evidentiary documents, and imaging turnaround times.

We conducted this performance evaluation from November 2006 to April 2007 in accordance with Quality Standards for Inspections, issued in January 2005, by the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency.

**BACKGROUND**

The Commission's Electronic Documents (EDOCS) program consists of two data management projects: the Electronic Production Project and the National Imaging Project. The Electronic Production Project involves the loading of evidentiary materials from Enforcement cases (either in Headquarters or the regional offices) into an application called Concordance. This application allows authorized staff to retrieve and view the documents.

The National Imaging Project provides data back-up and disaster recovery for the program. It provides for the removal of voluminous evidentiary documents from Enforcement premises in Headquarters and the regional offices.

OIT, in consultation with Enforcement, manages the Electronic Documents program. Funding for the program totaled $9.3 million and $10.5 million in fiscal years 2006 and 2007, respectively. While Enforcement is the largest user of the program, other Commission divisions and offices also use the service.

Three contractors help implement the program: LABAT-Anderson (LABAT), CACI International, Inc. (CACI), and Abacus Technology (Abacus).

LABAT processes media (e.g., CDs, DVDs, hard drives) and paper documents into standard formats and then loads them into Concordance. Under its contract, LABAT must load paper documents into Concordance within ten business days of receipt, and electronic media within seven business days of receipt. Depending on volume, LABAT has up to approximately 160 of its employees assigned to the program.

CACI has eleven of its contractors assigned to quality assurance of LABAT's work. CACI contract employees follow a checklist to determine whether loaded documents are free of errors. CACI reports any exceptions to Commission staff. In January 2007, the Commission temporarily acquired additional services through CACI to process electronic documents, because it experienced problems with LABAT.

Abacus has one to two of its employees assigned to the program. Abacus helps to prepare deliverables, such as project plans and schedules, and standard operating procedures.

Several regional offices process and load electronic and paper documents locally, instead of sending them to Headquarters. As a result, the regional offices maintain control of the media and can load and access the documents faster. To facilitate this process, Headquarters has granted more server space to these regional offices upon request.
AUDIT RESULTS

The Commission has significantly improved the Electronic Documents program since our 2004 review. The improvements include better image quality, decreased turnaround times, reduced system delays, additional contractor and administrative support, better electronic links to documents, fewer system outages, and elimination of document mix-ups (mixing imaged documents from one case with those of another). Program users whom we surveyed were now generally satisfied with the Electronic Documents program.

During the audit, Commission staff addressed a safety hazard, improved working conditions for LABAT contract employees and designated appropriate staff as Contracting Officer's Technical Representatives (COTRs).

We are making several recommendations to improve the program further, as discussed below.

WRITTEN GUIDANCE

Policy statement

The Division of Enforcement has not prepared an overall policy statement for the Electronic Documents program. An overall policy statement would describe in general terms the program’s objectives, goals, requirements, responsibilities, and policies.

All of the written guidance has been prepared by contractors. Contractors could refer to this document in defining specific procedures and work instructions.

Standard Operating Procedures

The program’s contractors have prepared a number of standard operating procedures (SOP) for the document imaging process. However, a number of these procedures have not been finalized.

Enforcement plans to prepare an SOP for its headquarters and regional office staff. The SOP will include Commission-specific guidelines and relevant parts of the contractors’ SOPs.

Protecting Non-Public Information

The Commission has issued guidance on safeguarding non-public information. However, there is currently no Enforcement-wide written guidance explaining how to protect and account for electronic documents in Concordance and original evidentiary data, which frequently are non-public. A supplemental written procedure should include the following:

- Which staff should have access to case files in Concordance;

2 Enforcement’s Forensics Branch issued written guidance on evidence handling and security procedures, including the use of off-site secure storage facilities for protecting electronic evidentiary data. This guidance pertains only to documents handled by the forensics branch staff.
• The process for requesting and granting access to case files in Concordance;
• Procedures for sending discovery documents via e-mail;
• Preserving the authenticity of electronic data and preventing spoilage (e.g., ensuring original media is not inadvertently altered);
• How to name electronic folders in Concordance to preserve anonymity and uniformity throughout the Commission;
• Removing Concordance access rights to staff who no longer require access (e.g., when staff transfer to another division or perform a detail outside of Enforcement);
• Password administration and protections in Concordance;
• How to document media and paper evidentiary documents received and provided to third parties (discussed later in report);
• Storing and mailing media and paper evidentiary documents to McLean, VA for processing (discussed later in report); and
• Chain of custody requirements (discussed later in report).

**Correcting Errors**

CACI performs a quality assurance process after LABAT loads documents into Concordance. CACI may identify and report to Enforcement problems such as duplicate data, missing pages, incomplete files, unsearchable data, or unindexed databases. LABAT subsequently changes or overlays live data to remedy the problem.

Enforcement officials told us that they notify Enforcement staff when significant changes are made and informed us what constitutes a significant change. However, this procedure is not in writing.

Written guidance is needed on the process for correcting errors in case documents on Concordance, including notification to Enforcement staff assigned to the case being corrected.

**Recommendation A**

Enforcement, in consultation with OIT and relevant contractors, should issue or finalize program guidance covering (1) a policy statement; (2) standard operating procedures; (3) protecting non-public information; and (4) notification to appropriate staff of error correction. Enforcement should establish timeframes for distributing this guidance to user offices (at Headquarters and the regional offices).

**QUALITY ASSURANCE**

**Electronic Media**

Loading media (e.g., CDs, DVDs, hard drives) completely and accurately into Concordance is crucial in ensuring that Enforcement staff can access and search all of the evidentiary documents received. Enforcement staff informed us that loading
media completely and accurately can be very complex and typically takes two years to master.

LABAT processes and loads media into Concordance. LABAT then conducts quality control checks to ensure the media was loaded completely and accurately.

LABAT's draft written procedures describe its data loading and quality assurance processes. However, we identified problems with the quality of LABAT's processing of electronic documents. We could not determine if the problems resulted from inadequate procedures, failure to follow procedures or a combination. In January 2007, Enforcement temporarily discontinued LABAT's services in this area and hired additional services through CACI. We also noted the following:

- LABAT's loading and quality assurance process has not undergone a verification and validation procedure to ensure standards compliance and consistency;
- While LABAT staff refer to a checklist when performing quality assurance checks on media that has been loaded into Concordance, LABAT staff are not required to fill out the checklist or otherwise document whether the quality control steps were performed. As a result, we could not determine the consistency and accuracy of LABAT's quality assurance process.
- LABAT does not document the types and number of files on the media nor does it document the types and number of files loaded into Concordance. Recording and comparing this information could better ensure that all media is completely and accurately loaded into Concordance.
- Enforcement does not have a formal procedure to oversee LABAT's loading and quality assurance processes.

**Recommendation B**

Enforcement should ensure that LABAT (or any contractor or Commission staff performing this role) consistently follows an adequate data loading and quality assurance procedure. This could be accomplished by:

- Requiring LABAT's loading and quality assurance process to undergo a verification and validation procedure;
- Requiring LABAT to fill out a checklist or otherwise document whether key quality assurance steps were performed and their results;
- Requiring LABAT to document the types and number of files on the media and the types and number of files loaded into Concordance and compare this information; and
- Developing a formal procedure to oversee LABAT's loading and quality assurance processes. This could be accomplished by checking a sample of LABAT's work and performing periodic audits.

While CACI performs quality assurance steps on all the data that has been loaded into Concordance, CACI does not compare data in Concordance with data on the
original media. As a result, CACI's quality assurance process may not identify data that failed to load, nor would it identify data that displayed differently on Concordance than on the original media. CACI's current process cannot verify whether all data were completely and accurately loaded into Concordance.

**Recommendation C**

Enforcement should ensure that CACI compares an adequate sample of data in Concordance to the original media to determine whether all data were completely and accurately loaded, and are displayed properly. Enforcement may wish to consult with OEA in determining an adequate sample size and procedure.

**Paper Documents**

Each month, CACI selects a sample of 15 boxes of paper documents to determine whether LABAT had completely and accurately loaded these documents into Concordance. CACI compares each original document to the image in Concordance. CACI reports any exceptions to the OIT COTR and LABAT is tasked with making appropriate changes. The OIT COTR does not currently follow-up to ensure the changes were made.

**Recommendation D**

OIT should ensure that LABAT corrects the exceptions reported by CACI, and OIT should verify the corrections.

CACI's sample of paper documents is limited to those loaded at LABAT's McLean, VA office, and does not include documents loaded at Headquarters.

**Recommendation E**

Enforcement should require CACI to select its sample of paper documents from Headquarters, as well as McLean. Enforcement may wish to consult with OEA in determining an adequate sample size and procedure.

**REGIONAL OFFICES**

**Document Loading**

The regional offices often load electronic media into Concordance. Headquarters has not yet issued any written procedures to the regional offices and the regional offices are inconsistent in their loading procedures, including their quality control checks. For example:

- The regional offices do not follow standard quality control procedures to ensure data quality, and do not benefit from CACI's quality assurance checks.
- Regional offices vary in the extent of experience they have in loading data into Concordance.

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3 According to Enforcement, depending on monthly volume, CACI's sample represents about three to five percent of the volume of paper documents processed in McLean, VA.
• Regional offices vary in the access rights provided to their staff. Some restrict access to the attorneys working on a particular case, while others allow all Enforcement staff in the region to view case files.

• Some regional offices have inappropriately used the name of a particular case in the file name (which identifies the individual or company under investigation) rather than the case number.

**Recommendation F**

Enforcement, in consultation with OIT and the regional offices, should develop written procedures for data loading work done by the regional offices, including quality control checks. The procedures should address the issues raised by the bullet points above.

**Submission of Documents**

Some regional cases are processed by LABAT. For these cases, the regions mail boxes of evidentiary documents to LABAT's McLean facility.

We found that some of these boxes contained the case name or details about the company (name, address, etc.) on the box mailing label, in contrast to Enforcement's policy. To preserve confidentiality, only the case number should appear on the box label.

**Recommendation G**

Enforcement should remind the regional offices of the correct procedure for labeling boxes of evidentiary documents that are mailed to LABAT (e.g., exclude or cover the case name or company's name, address, etc.).

**Expertise**

Several regional office staff told us they needed more Concordance training, especially for more advanced functions. Attorneys whom we surveyed also indicated that additional training should increase the staff's use of Concordance. Some attorneys are presently reluctant to use Concordance because they prefer reviewing paper documents or are not convinced of Concordance's reliability.

Litigation support specialists are the most knowledgeable of Concordance and in the best position to provide training to Enforcement's attorneys. There are six litigation support specialists in Headquarters and two of the eleven regional offices have their own litigation support specialist.

In 2006, Headquarters' litigation support specialists provided a limited number of on-site training sessions at the regional offices. Because of budgetary constraints affecting travel, this training has been curtailed. Enforcement also provided two web-based training sessions in 2006, but indicated that live training is more effective.

Some regional office IT staffs provided Enforcement's attorneys with Concordance training, although they lacked sufficient Concordance expertise.
**Recommendation H**

Enforcement should explore ways to provide additional Concordance training and expertise to the regional offices. Some options include hiring additional litigation support specialists in the regions, contracting with an outside firm, or enhancing the web-based training.

**INTERNAL CONTROL OF EVIDENTIARY DOCUMENTS**

**Recording**

Outside parties (e.g., opposing counsel) send evidentiary documents directly to Enforcement's attorneys. The attorneys send the documents to Enforcement's litigation support specialists who forward the documents to Commission contract employees for processing and loading into Concordance.

Enforcement provides a training class that, among other things, instructs attorneys to maintain on Enforcement's J: drive, a description of evidentiary documents received. However, Enforcement has no assurance they are doing so. Individual attorneys use their discretion in recording documents received and deciding where to store these records. Attorneys also use their discretion over whether to prepare and maintain a list of documents they send to third parties (e.g., opposing counsel or another government agency). Enforcement officials expressed particular concern about recording practices in the regional offices.

Best practice guidelines suggest that agencies should develop a procedure to ensure that evidentiary documents are properly preserved and protected from spoilage or alteration. To achieve this, agencies should establish and enforce a procedure to record evidentiary documents received from and provided to third parties.

One option is to receive all evidentiary documents in central locations (e.g., a central location at headquarters and each regional office) and designate staff to prepare and preserve records outlining all documents received and sent to third parties.

While such a policy should enhance internal control, if it is implemented, Enforcement would need to ensure that any resulting delays in providing documents to its attorneys are mitigated. For example, Enforcement attorneys should be provided with the contact information of the staff who receive the documents and the staff should notify Enforcement attorneys as soon as the documents are received. Enforcement would also need to address possible exceptions to the policy. For example, third parties sometimes provide documents directly to Enforcement attorneys during testimony. Enforcement would need a procedure to ensure that such documents are recorded.

**Recommendation I**

Enforcement should develop and enforce a procedure to record and maintain information about evidentiary documents received from and sent to outside parties (e.g., the type of documents, the quantity, the receipt date, and the name of the outside party). Enforcement should consider requiring the receipt and recording of all evidentiary documents in central locations.
**Chain of Custody**

Best practice guidelines suggest that internal transfers of evidentiary documents should be recorded on a chain of custody form. All persons taking possession of the documents are to sign and date the form, to provide a trail of each person who had custody of the documents.

This procedure would help ensure that evidence is protected and unaltered. Additionally, it would provide the Commission with recourse if a case went to trial and the opposing side claimed that documents had been altered.

Enforcement’s Forensics Branch staff use a custody form, but other Enforcement staff do not typically use this form.

Some Enforcement attorneys indicated that using a chain of custody form could provide greater assurance that all documents had been loaded into Concordance. Staff in Enforcement’s Trial Unit generally believed that a chain of custody form would be especially useful for documents that are more susceptible to alteration, such as audio and video tapes.

This concern may be partially addressed by a new procedure called Box Document Tracking System (BDMT), which is expected to be implemented in 2007. BDMT involves placing a bar code label on each evidentiary document, to help determine where it is and its current stage of production.

**Recommendation J**

Enforcement should consider whether to implement a chain of custody form, and if so, for which types of documents.

**Forensics Program Centralization**

Enforcement’s Forensics Program (Program) consists of eight headquarters staff who each have from 3-10 years of relevant experience and related certifications. Program staff process certain electronically stored information (ESI) such as hard drives, in a secure lab at headquarters, which requires special processing and storage to maintain its authenticity and evidentiary value. This is critical in the event of litigation.

The forensics program makes its service available to the regional offices. However, regional office IT staff process ESI themselves. Unlike headquarters’ forensic staff, the regions do not typically maintain chain of custody records or store ESI in secure locations, and their staff do not typically have forensics training.

Enforcement officials indicated that centralizing all forensics work at headquarters would be preferable to the current arrangement. Best practices suggest that centralization improves the quality and consistency of work products, allows for more collaboration among peers, achieves economies of scale and reduces overall costs. To accommodate centralization, Enforcement has requested Commission funding for a larger on-site lab, with adequate evidence storage, to accommodate proper document preservation, increased staffing and data processing.

If the processing of forensics documents is centralized, Enforcement would need to coordinate with the regional offices to develop a formal means to administer the program, develop criteria to determine which ESI should be processed by
headquarters staff, establish internal controls, turnaround times, polices and procedures.

**Recommendation K**

Enforcement, in consultation with the regional offices and OIT, should consider the feasibility of implementing a larger forensics lab. If approved by the Commission, a larger forensics lab, with adequate evidence storage, should be built at headquarters to accommodate proper document preservation, increased staffing, and data processing.

**SLOW CONNECTIVITY**

Several regional offices indicated that accessing documents from a Headquarters server takes significantly more time than accessing documents loaded locally. OIT and Enforcement have researched this, but have not determined the cause of this problem. Possible solutions include:

- Allowing all the regional offices to continue to load their data onto a local server and check their own data for quality assurance;
- Allowing all the regional offices to continue to load their data onto a local server and have headquarters or CACI contract employees remotely check the data for quality assurance; and
- Processing, loading and performing CACI's quality assurance checks on the data at headquarters and then transferring the data to the regional office servers for staff use. (Headquarters experimented with this method and found that data transmissions took approximately three times longer than anticipated, which slowed down the network).

**Recommendation L**

OIT, in consultation with Enforcement, should continue researching problems related to slow connectivity to Concordance and implement a solution.

**REMOVAL OF CLOSED CASE FILES FROM CONCORDANCE**

Except for one region, Enforcement and the regional offices do not remove closed case files from Concordance. Removal of these files would provide additional server space. Before removing files, however, Commission staff must ensure relevant documents are preserved in compliance with record preservation requirements. This is a time-consuming task that Enforcement staff often do not prioritize.

Additionally, the Commission does not have agency-wide guidance on the preservation of electronic documents. Enforcement is consulting with the Office of General Counsel (OGC) and other relevant offices to develop appropriate guidance.
Recommendation M

Enforcement, in consultation with OGC and other affected offices, should issue guidance on preservation of electronic records. Before or by the time the guidance is issued, Enforcement should require the removal of closed case files from Concordance and periodically audit the process to ensure compliance.

TURNAROUND TIMES

Currently, neither LABAT nor the Commission has a reliable way to determine whether contract turnaround requirements (ten business days for paper, seven business days for media) are being met. LABAT plans to implement a tracking system for paper documents and media in 2007 (BDMT), which is expected to address this issue.

Enforcement indicated that documents are not typically loaded into Concordance within the prescribed time. LABAT has not sought additional compensation (as permitted under the contract) for meeting its timeliness goals.

Enforcement and OIT are working with LABAT to decrease turnaround times.

Recommendation N

In consultation with OIT, Enforcement should continue its efforts to decrease imaging turnaround times and to track them reliably.

PERFORMANCE ISSUE

Enforcement and OIT indicated that they have identified certain performance issues with LABAT's work products, particularly its electronic discovery work, which included converting native files to "TIFF" images, applying bates numbers to electronic documents and extracting metadata from files. As a result, in January 2007, Enforcement temporarily transferred some functions from LABAT to CACI.

Recommendation O

OIT, in consultation with Enforcement and the Office of Administrative Services (Procurement and Contracts Branch) should take appropriate action to address the identified performance issues with LABAT.

COTR

The Contracting Officer's Technical Representative (COTR) for the Electronic Documents program is an OIT employee located at the Operations Center in Alexandria, VA.

The COTR has numerous, time-consuming responsibilities related to the contract as well as other obligations. Additionally, Enforcement is the primary user of the program and, like many of the program's contract employees, is located at Headquarters (Station Place). It may be appropriate, therefore, to designate
someone in Enforcement as a task monitor or program manager to perform certain tasks.

**Recommendation P**
OIT, in consultation with Enforcement and the Office of Administrative Services, should consider designating a task monitor or program manager in Enforcement or OIT to perform certain contract tasks. If designated, this person’s responsibilities should be explicitly stated.

**BACKGROUND INVESTIGATIONS**

Like other Commission contractors, the contract employees working on the Electronic Documents program are required to undergo a background investigation. They must receive a favorable fingerprint and credit check before beginning work. The remainder of the background investigation is completed later. The background investigation helps ensure that contract employees do not create a security risk.

We selected a sample of 38 contract employees, consisting of 25 from LABAT, 11 from CACI, and 2 from Abacus. We found that a background investigation had not been conducted for 13 of the LABAT contract employees.

Twelve of the 13 contract employees had not completed the background questionnaire, the starting point for a background investigation. An additional contract employee completed the questionnaire, but had not signed and dated it.

The OIT COTR is responsible for beginning the background investigation process by submitting contract employees’ names and contact information to the Office of Human Resources (OHR). OHR then sends the contract employees the background questionnaire to complete. In the 12 cases where the questionnaires were not filled out, we did not find evidence that the COTR had submitted the names of these contract employees to OHR.

**Recommendation Q**
OIT, in consultation with OHR, should ensure that a background investigation is performed for the thirteen contract employees we identified. (We provided the contract employees’ names to Enforcement and OIT).

**Recommendation R**
OIT, in consultation with OHR and Enforcement, should develop a procedure to ensure that the names of contract employees for the Electronic Documents program are timely submitted to OHR for a background investigation.

**NON-DISCLOSURE AGREEMENTS**

In addition to undergoing a background investigation, contract employees for the Electronic Documents program must sign a non-disclosure agreement before beginning work. We reviewed whether the thirty-eight contract employees from our sample (see above finding) had signed the most current version of the agreement (August 2006).
Signed non-disclosure agreements were available for only seven of the thirty-eight contract employees in our sample. Moreover, only two of the seven had signed the current version of the agreement.

**Recommendation S**

OIT should ensure that all contract employees for the Electronic Documents program sign the current version of the Commission's non-disclosure agreement. OIT may wish to designate a central location for storing the signed agreements. OIT should establish a procedure to ensure that future contract employees sign the Commission's non-disclosure agreement on a timely basis.