



Office of Inspector General
Export-Import Bank of the United States

**Follow-Up of Audit Recommendations
Reported In
Medium Term Export Credit Program –
Information Technology (IT) Systems,
Support and Governance**

Evaluation Report
June 30, 2010
OIG-EV-10-01



Office of Inspector General

Export-Import Bank
of the United States

June 30, 2010

MEMORANDUM

TO: John McAdams, Senior Vice President, Export Finance
Kenneth Tinsley, Senior Vice President, Credit and Risk Management
John Simonson, Senior Vice President and Chief Financial Officer
Fernanda Young, Chief Information Officer

FROM: Jean Smith
Assistant Inspector General for Audit

A handwritten signature in cursive script that reads "Jean Smith".

SUBJECT: Audit recommendations reported in *Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance* (June 12, 2009, OIG-AR-09-05)

This memorandum transmits Evaluation Report OIG-EV-10-01, *Follow-Up of Audit Recommendations Reported In Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance*. The Office of Inspector General contracted with Protiviti to evaluate management's progress in implementing recommendations contained in the subject audit. The specific objective was to determine whether the Export-Import Bank of the United States (Ex-Im Bank or the Bank) implemented actions to correct deficiencies in the IT systems and processes to administer the Medium Term (MT) Program.

The evaluation found that Ex-Im Bank addressed many of the deficiencies. Although the specific recommendations may not have been implemented fully, the Bank has taken the necessary actions to establish appropriate controls in most of the areas that needed strengthening. Based on these actions, we closed four of five recommendations reported in OIG-AR-09-05. The Chief Information Officer plans to address the remaining open recommendation by publishing an IT Strategic Plan after the completion of the Bank's Strategic Plan, which is expected to be finalized in July 2010.

We made one suggestion to further strengthen the IT support for the MT Program for the CIO's consideration. The CIO concurred with the suggestion.

We appreciate the courtesies and cooperation provided to the auditors during the evaluation. If you have any questions, please call me at (202) 565-3944.

cc: Fred P. Hockberg, Chairman and President
Audit Committee
Alice Albright, Senior Vice President, Chief Operations Officer
Michael Cushing, Senior Vice President, Resource Management
Jeffrey Abramson, Vice President, Trade Finance and Insurance
Walter Hill, Vice President, Credit Review and Compliance
Michele Kuester, Vice President, Operations and Data Quality
David Carter, Vice President, Credit Underwriting
Ravi Arulanantham, Senior Advisor to the Chairman
Shannon McCall, Audit Liaison

Export-Import Bank of the United States

Follow-Up of Audit Recommendations Reported In
Medium Term Export Credit Program –
Information Technology (IT) Systems, Support and
Governance (June 12, 2009, OIG-AR-09-05)



Executive Summary

The Office of Inspector General contracted with Protiviti to conduct an evaluation of management's progress in implementing recommendations contained in the performance audit report *Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance* (June 12, 2009, OIG-AR-09-05). The specific objective was to determine whether the Export-Import Bank of the United States (Ex-Im Bank or the Bank) implemented actions to correct deficiencies in the IT systems and processes to administer the Medium Term (MT) Program. Having strong controls in the Program is critical to prevent fraud and to serve U.S. exporters.

Our evaluation found that Ex-Im Bank has addressed many of the deficiencies. Although the specific recommendations may not have been implemented fully, the Bank has taken the necessary actions to establish appropriate controls in most of the areas that needed strengthening. Based on these actions, we closed four of five recommendations reported in OIG-AR-09-05. Appendix A presents a summary of the results of follow-up testing of audit recommendations reported in OIG-AR-09-05.

The actions taken by Ex-Im Bank are presented below.

Management Oversight and Accountability

The Vice President (VP) of Trade Finance and Insurance (TFI) has been designated as the senior manager responsible for the ongoing development of detailed IT business requirements in response to strategic objectives identified for the MT Program. This VP determines the priorities for Ex-Im On-Line (EOL) enhancements for the MT Program and, together with his staff, has reviewed, updated, and categorized the MT list of Change Requests (CRs). Additionally, the VP of Operations and Data Quality has defined and reviewed with senior management a prioritized list of 20 categories of enhancements/fixes that will be used to establish the scope and direction of future releases of EOL. All CRs, including those related to MT, have been mapped to the prioritized categories. In addition, the EOL User Group has been meeting on a more regular basis and the VP of TFI attends most of the meetings, along with other representatives from his group.

Improvements to the IT Systems that Support the MT Program

The Bank has developed a new Ex-Im Reporting System (ERS) that encompasses an enterprise-wide data repository/warehouse and related business intelligence reporting tools. The new data warehouse enables the Bank to consolidate data that exists in multiple files and data bases across several systems that support the MT Program. ERS provides data in a more timely, reliable and user friendly manner.

The Office of the Chief Information Officer (OCIO) is in the process of working with TFI and Credit Underwriting (CU) officials to identify requirements and criteria for classifying transactions according to their risk profile and corresponding lender ratings.

The VP of Operations and Data Quality has established a process for reviewing and scrubbing participant data to minimize data duplication and improve data quality. Also, this office and other Ex-Im Bank offices review applications to help identify applicants that may be fraudulent or likely to default.

Executive Summary

We suggest that the CIO continue to work with TFI and CU officials to identify requirements and criteria for classifying transactions according to their risk profile and corresponding lender ratings. These requirements and criteria should provide the basis for automating alerts and credit scoring models and thereby minimize dependency upon manual processes and controls. Also, we suggest that the CIO look for opportunities to integrate the various transaction systems that support the MT Program in order to minimize the steps involved in maintaining information in multiple systems and reduce the dependency on manual controls.

Improvements to the Systems Development Process

OCIO has made several improvements to the systems development process. More user friendly approaches for defining end user business requirements to supplement “Use Cases” have been implemented. The VP of Operations and Data Quality serves as a liaison between OCIO and the end users to help ensure that business requirements for CRs and enhancements are complete and clearly documented. The OCIO has also developed a suite of automated regression test scripts to provide for more comprehensive testing of new releases. In addition, training materials and frequently asked questions have been provided online to make training more readily available to end users and improve their level of understanding of the systems that support the MT Program.

Open Recommendation

Although the Bank has taken positive steps to address several of the deficiencies, one of the five recommendations remains open. An IT Strategic Plan has yet to be developed for the MT Program. The Ex-Im Bank Chairman has started a Strategic Planning initiative and a Bank-wide strategic plan is expected to be finalized in July 2010. The OCIO will develop and map corresponding IT strategies and plans to the specific goals of the MT Program once the Bank-wide strategic plan is completed, including MT specific strategic goals and objectives.

Management Response

The CIO concurred with our findings. To close the open recommendation, the CIO will publish an IT Strategic Plan three months after the July 2010 completion of the Bank’s Strategic Plan.

The CIO also concurred with our suggestion. The CIO will continue to work with officials to minimize the dependency on manual processes and controls, and seek opportunities to integrate systems that support the MT Program.

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Background and Objectives

Background The Export-Import Bank of the United States (“Ex-Im Bank” or the “Bank”) is the official export credit agency of the United States. Ex-Im Bank supports the financing of U.S. goods and services in international markets, turning export opportunities into actual sales that help U.S. companies of all sizes to create and maintain jobs in the United States. Ex-Im Bank assumes the credit and country risks that the private sector is unable or unwilling to accept. Ex-Im Bank also helps U.S. exporters remain competitive by countering the export financing provided by foreign governments on behalf of foreign companies. At the same time, the Bank must safeguard taxpayer resources by determining that there is a reasonable likelihood of repayment with respect to each of its transactions.

Ex-Im Bank offers short term (“ST”), medium term (“MT”) and long term (“LT”) export credit financing products. The core MT products offered by Ex-Im Bank are as follows:

MT Loan Guarantees: Ex-Im Bank loan guarantees cover the repayment risks on the foreign buyer’s debt obligations incurred to purchase U.S. exports. Ex-Im Bank guarantees to a lender that, in the event of a payment default by the borrower, the Bank will pay to the lender the outstanding principal and interest on the loan. Ex-Im Bank’s comprehensive guarantee covers 100 percent of the commercial and political risks for up to 85 percent of the U.S. contract value of the export transaction. Guarantees extended under the MT Program typically have repayment terms of one to seven years and range in amount from \$100 thousand or less to \$10 million.

MT Export Credit Insurance: Ex-Im Bank credit insurance helps U.S. exporters develop and expand their overseas sales by protecting them against loss should a foreign buyer or other foreign debtor default for political or commercial reasons. Similar to the loan guarantee product, Ex-Im Bank covers 100 percent of the commercial and political risks for up to 85 percent of the U.S. contract value of the export transaction. Credits insured under the MT Program typically have repayment terms of one to seven years ranging from \$100 thousand or less to \$10 million.

Direct Loans: Ex-Im Bank’s direct loan Program is a foreign buyer credit program in which Ex-Im Bank makes a loan to a foreign buyer to purchase U.S. exports. Loan disbursements go directly to the U.S. exporter as the export products are shipped to the foreign buyer.

Background and Objectives

To support the processing and management of the MT Program, Ex-Im Bank uses the following systems:

- Ex-Im Online (EOL)
- Application Processing System (APS)
- Loan and Guarantee Accounting System (LGA)
- Claims and Recovered Debt Servicing System (CARDS)
- Insurance Information System (IIS)
- Asset Management System (AMS)
- Ex-Im Reporting System (ERS)

The following is a summary of the key applications supporting the MT Program:

EOL - This web-based system provides basic transaction origination support to the MT Program. The front end intake processing portion of the system captures the initial application data, tracks documents and manages the work flow. The system feeds data to LGA, CARDS and IIS. Prior to EOL, the AS400 system was used to process MT transactions.

APS – This legacy mainframe system was the predecessor of EOL. It allowed the bank to process case-related information from initial customer contact through application receipt, case evaluation, credit analysis, and authorization. While new applications are not submitted to APS, it does contain historical data on applications received before EOL was implemented.

LGA and CARDS – These systems are converted, legacy mainframe systems that provide basic accounting, general ledger and claims processing support to all of the Bank's programs. The systems have been re-hosted to a server platform maintained at the Bank to enable them to take advantage of more current web-enabled technologies similar to those supporting the EOL System.

IIS – This is a Structured Query Language (SQL) Server database developed in the early 1990s that is used for reporting. It aggregates data from different system repositories, mainly the Financial and Administrative System and EOL databases. Although sometimes referred to as a data warehouse, it does not meet the definitions of a data warehouse. Users have had to resort to manual processes and “workarounds” to find data that should be in the IIS.

AMS – This system is a Lotus Notes application developed and used by the Asset Management Division to monitor deals other than ST and working capital.

ERS – Ex-Im Reporting System is an enterprise-wide data repository/warehouse and related business intelligence reporting tools. The new data warehouse enables the Bank to consolidate data that exists in multiple data bases across several systems that support the MT Program. ERS provides data that is timely, accurate and easy to access. It supplies critical metrics and detailed customized reporting for use by the MT Program staff.

Background and Objectives

Objectives

The specific objective of this evaluation was to determine whether Ex-Im Bank implemented actions to correct the identified weaknesses reported in audit report *Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance (June 12, 2009, OIG-AR-09-05)*.

Scope and Methodology

The scope of the evaluation focused on IT systems and related processes supporting Ex-Im Bank's MT Program. Fieldwork was conducted on-site at Ex-Im Bank's headquarters in Washington, DC in April 2010.

Interviews were held with key personnel in order to evaluate management's progress in addressing audit findings and implementing recommendations contained in performance audit report *Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance* (OIG-AR-09-05, June 12, 2009). Specifically, we met with representatives from the following divisions of the Bank: Credit Review and Compliance, Operations and Data Quality, Trade Finance and Insurance (TFI), Credit and Risk Management, and Office of the Chief Information Officer (OCIO).

We also reviewed documentation that supported management's progress in implementing corrective actions. Detailed testing of MT transactions was not conducted as part of the evaluation.

The technology review focused on the management oversight of the IT support for the MT Program, and the key systems and IT processes supporting the MT Program. The primary systems reviewed were the EOL system and the new Ex-Im Reporting System (ERS) hosted on Ex-Im Bank's on-site servers.

We performed this evaluation because historically the MT Program has significantly underperformed the Short Term and Long Term Programs. Having strong controls in the MT Program is critical to prevent fraud and serve U.S. exporters.

Findings Follow-Up and Suggestions

IT Systems, Support and Governance

The below finding titles are a repeat of titles presented in *Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance* (June 12, 2009, OIG-AR-09-05) and are not intended to convey a present deficiency. Use of these titles is to report on the status of recommendations presented in OIG-AR-09-05.

Finding 1

MT Program IT Planning is Needed

Ex-Im Bank took actions to more effectively govern the level of systems support the MT Program is receiving. The Vice President (VP) of TFI has been designated as the senior manager with responsibility for the management of IT systems support for the MT Program. In addition, the VP of Operations and Data Quality serves as the liaison between the MT Program users and the OCIO. Specific actions to address improving IT support for the Program included:

- The MT list of Change Requests (CRs) has been reviewed and updated.
- A prioritized list of 20 categories of enhancements/fixes has been defined by the VP of Operations and Data Quality Division and reviewed with management, including the VP of TFI. These categories will be used to establish the scope and direction of future releases of EOL. All CRs, including those related to MT, have been mapped to the prioritized categories.
- The EOL User Group, which establishes the priorities for EOL enhancements for the MT Program, has been meeting on a more regular basis. The VP of TFI attends most of these meetings and other TFI staff members also attend the meetings regularly.

While the above efforts are positive, an IT Strategic Plan has still not been developed for the MT Program. The Bank is developing a detailed strategic plan including specific goals and objectives for the MT program. That plan is going to be used by the OCIO to develop MT specific IT Strategic objectives and milestones. Prior to this review, the Ex-Im Bank Chairman started a Strategic Planning initiative, in which a high level Bank-wide plan had been drafted and circulated for senior management review and comment. Management estimated the Bank-wide strategic plan to be finalized in July 2010.

The OCIO is working in parallel with the team preparing the Bank Strategic plan and will develop and map corresponding IT strategies and plans that align and integrate each program's IT requests with the Bank-wide goals and priorities. The IT plan will also align with specific objectives and goals of the MT Program.

Based on the above, we determined that Ex-Im Bank's actions satisfy OIG-AR-09-05 recommendation 1B. However, recommendation 1A in OIG-AR-09-05 remains open. The CIO should develop an IT Strategic Plan that is aligned with the MT Program business plan and covers the same time period.

Findings Follow-Up and Suggestions

Management Response

The CIO stated that the OCIO will publish the IT Strategic Plan three months after the completion of the Bank Strategic Plan including specific MT objectives. The IT strategies and plans will align and integrate each program's IT requests with the Bank-wide goals and priorities and address specific objectives and goals for the support of the MT short term and long term objectives.

Finding 2

IT Systems that Support the MT Program Need Improvement

Ex-Im Bank has identified and implemented actions to enhance the functional IT capabilities to support the MT Program. One implemented action was that the OCIO developed the ERS which encompasses an enterprise-wide data repository/warehouse and related business intelligence reporting tools. The new data warehouse enables the Bank to consolidate data that exists in multiple files and data bases across several systems that support the MT Program. ERS provides data that is more timely, accurate and easy to access. It supplies critical metrics and detailed customized reporting for use by the MT Program staff. For example, the "Overdue History" report supports MT Guarantees and other types of transactions currently not processed in EOL. Use of the "Overdue History" feature can result in an e-mail notification being sent by EOL to the appropriate analyst when a payment is overdue. A link is available to view historical data in ERS listing all participants associated with an overdue transaction.

Additional actions to improve IT support of the MT Program include, but are not limited to, the below.

The OCIO is in the process of working with TFI and Credit Underwriting (CU) to define objective criteria for classifying transactions according to their risk profile and corresponding lender ratings. These requirements and criteria should provide the basis for automating alerts and credit scoring models and thereby minimize dependency upon manual processes and controls.

Since our initial audit, the VP of Operations and Data Quality established a team that reviews and scrubs participant data to minimize duplicate participant names and improve data quality. The need for these manual controls can be attributed to some extent to the non-integration of systems used for the MT Program.

In addition to the above manual effort, we found that several divisions in Ex-Im Bank manually review applications to determine if they require further review by the General Counsel's Office in an effort to minimize losses from fraud and defaults.

Findings Follow-Up and Suggestions

Recognizing that Ex-Im Bank has been working to improve IT support for the MT Program, we determined that management has implemented adequate action to satisfy OIG-AR-09-05 recommendations 2A and 2B. However, continued work to automate MT Program requirements and integrate systems would result in providing effective and efficient processing and monitoring of the MT Program.

Suggestion 1

The CIO should continue to work with TFI and CU officials to identify requirements and criteria for classifying transactions according to their risk profile and corresponding lender ratings. Also, the CIO should look for opportunities to integrate the various transaction systems that support the MT Program in order to minimize the steps involved in maintaining information in multiple systems and reduce the dependency on manual controls.

Management Response

The CIO stated that the OCIO will continue to work with the re-aligned Trade Finance and Credit Management officials to 1) identify requirements and criteria for classifying transactions according to their risk profile and corresponding lender ratings, and 2) seek opportunities to integrate the various transaction systems that support the MT program.

Finding 3

Systems Development Process Needs Improvement

The OCIO has taken several steps to improve the use of systems development methodologies for business requirements definition, the level of testing, and the availability of end user training throughout the design and build out of EOL. These include:

- Developing a suite of automated regression test scripts for testing with each release.
- Utilizing the VP of Operations and Data Quality as a liaison between OCIO and the business users. This individual works closely with both groups to help ensure that business requirements are clearly articulated and documented, properly translated into code and sufficiently tested.
- Implementing a new EXIMNET page, "EXIM Online Resources," that includes training materials for new releases and frequently asked questions, making training more readily available to end users and thereby improving their level of understanding of the systems supporting the MT Program.

Based on the above actions, we determined that management has implemented adequate action to satisfy OIG-AR-09-05 recommendation 3.

Appendix A

The documentation below provides the results of follow-up testing of audit recommendations reported in *Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance* (June 12, 2009, OIG-AR-09-05). We determined that Ex-Im adequately addressed and closed four of five recommendations noted below.

Finding – Management, Oversight and Accountability of IT Support for the MT Program Needs Strengthening	
Recommendation 1A. Develop an IT Strategic Plan that is aligned with the MT Program business plan and covers the same time period.	Open
Recommendation 1B. <ul style="list-style-type: none"> • Designate a senior manager with responsibility and accountability for the management of the IT systems support for the MT Program throughout its life cycle. • Direct the designated senior manager to take a leadership role in the ongoing development of detailed business requirements in response to strategic objectives identified for IT support of the MT Program and requests for enhancements from system users and in the communication of those business requirements to the OCIO. • Direct the designated senior manager to obtain a plan of action and milestone schedule from the OCIO that addresses all outstanding CRs/defects, which should include all system capabilities required to meet management’s objectives for the MT Program, and to take prompt action to ensure the OCIO has timely and appropriately prioritized and developed a well documented plan to address each CR/defect. 	Closed
Finding – IT Systems that Support the MT Program Need Improvement	
Recommendation 2A. <ul style="list-style-type: none"> • Define and document the key transactional data fields that must be stored across all Ex-Im Bank programs and the structures and relationships between them. This data model would address the problems related to multiple participant files and other common reference data. The data model would also highlight information needs that are not currently met by existing databases or applications. • Develop, document and implement a plan to enhance the functional capabilities and interoperability of EOL and the other systems supporting MT Program transactions, with a focus on design and implementation of embedded system controls, such as: <ul style="list-style-type: none"> ○ automation of MT lender rating and credit scoring models; ○ automated system alerts that warn of transaction participants with prior claims history as well as denied, 	Closed

Appendix A

<p>withdrawn or fraudulent transactions across all Ex-Im Bank lending programs; and</p> <ul style="list-style-type: none"> ○ automated monitoring of all MT Program transactions regardless of size. 	
<p>Recommendation 2B. Develop data repositories that consolidate and organize the key transactional data fields.</p>	Closed
<p>Finding – Systems Development Process Needs Improvement</p>	
<p>Recommendation 3: Implement:</p> <ul style="list-style-type: none"> • A user friendly process for submitting and accepting new end user business requirements as it relates to requests for system enhancements. This process should also facilitate improved communication between the OCIO resources and end users to ensure that business requirements are accurately designed and that justification is provided for denied requests. • A more robust testing program that a) includes the development of a comprehensive suite of test cases and test scripts that can be automatically rerun multiple times and b) requires formal involvement of MT users in the development of the test cases, the execution of the tests and the sign-off of test results. • A more formal and comprehensive training program for EOL system users. The training should focus not only on the mechanics of the system but also on the policies and processes that the system is supporting. Details on the training program should be made available on Ex-Im Bank's website 	Closed

Appendix B

MANAGEMENT RESPONSE TO EVALUATION REPORT



EXPORT-IMPORT BANK
of the UNITED STATES

June 25, 2010

Jean Smith
Assistant Inspector General for Audit
Office of Inspector General
Export-Import Bank of the United States

Ref: Status Update - Follow-up of audit recommendations reported in Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance (June 12, 2009, OIG-AR-09-05)

Dear Jean:

Thank you for the opportunity to review and comment on the status of recommendations made in the audit report Medium Term Export Credit Program – Information Technology (IT) Systems, Support and Governance (June 12, 2009, OIG-AR-09-05).

We are in agreement with the determination of the status of the recommendations reported in OIG-AR-09-05. The Ex-Im Bank has continued to enhance its IT services and controls for the MT program. Four of the five recommendations reported in OIG-AR-09-05 are closed.

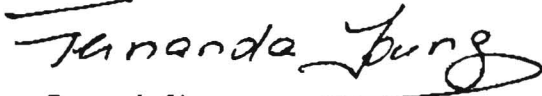
- The Office of the CIO (OCIO) will publish the IT Strategic Plan 3 months after the completion of the Bank Strategic Plan including specific MT objectives. The IT strategies and plans will align and integrate each program's IT requests with the Bank-wide goals and priorities and address specific objectives and goals for the support of the MT short term and long term objectives.
- The OCIO will also continue to work with the re-aligned Trade Finance and Credit Management officials to 1) identify requirements and criteria for classifying transactions according to their risk profile and corresponding lender ratings, and 2) seek opportunities to integrate the various transaction systems that support the MT program.

The Bank has accomplished a large number of critical milestones since the last review. For example: 1) the Bank has established a new due diligence process for fraud detection; 2) in July 2009, the Bank has deployed an enterprise-wide data model and

repository and related business intelligence tool (Ex-Im Reporting System (ERS)); 3) the overdue reporting to support MT Guarantees as well as non-Ex-Im Online (EOL) transactions (including WCG, CGF, Transportation, Structured Finance and LT deals) is available during underwriting; 4) a comprehensive default notice reporting system has been integrated into the EOL system to provide early warning and reporting functionality; 5) we developed a large suite of automated regression test scripts that are enhanced and executed with each release; and 6) a new intranet page "EXIM ONLINE RESOURCES" was developed including the schedules, user group minutes, training materials for new releases and FAQs.

The OCIO looks forward to working with you and is committed to evaluating and implementing the IT recommendations consistent with the broader strategic objectives of the Bank's leadership.

Sincerely,

A handwritten signature in black ink that reads "Fernanda Young". The signature is written in a cursive style with a horizontal line underneath the name.

Fernanda Young
Chief Information Officer

Cc:

John McAdams, Senior Vice President, Export Finance
Kenneth Tinsley, Senior Vice President, Credit and Risk Management
John Simonson, Senior Vice President and Chief Financial Officer
Michael Cushing, Senior Vice President, Resource management
Jeffrey Abramson, Vice President, Trade Finance
Alice Albright, Executive Vice president and Chief Operating Officer