# AUDIT OF THE FDIC'S STRATEGIC PLANNING FOR INFORMATION TECHNOLOGY RESOURCES

Audit Report No. 00-013 March 31, 2000



OFFICE OF AUDITS
OFFICE OF INSPECTOR GENERAL

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DATE: March 31, 2000

Donald C. Demitros, Director **MEMORANDUM TO:** 

Division of Information Resources Management and

Office of Audits

Chief Information Officer

Chris Sale, Chief Financial Officer

David H. Loewenstein FROM:

Assistant Inspector General

Report Entitled Audit of the FDIC's Strategic Planning for **SUBJECT:** 

*Information Technology Resources* (Audit Report No. 00-013)

The Federal Deposit Insurance Corporation (FDIC) Office of Inspector General (OIG) has completed an audit of the FDIC's strategic planning for information technology (IT) resources. The overall objective of this audit was to evaluate the effectiveness of the FDIC's strategic planning process and practices related to acquiring, developing, and managing IT resources. Significant improvements were made to the strategic IT planning processes during 1999. Our audit identified further opportunities for the FDIC to improve the manner in which it selects, manages, and evaluates major investments in IT.

This report contains 10 recommendations designed to improve the FDIC's IT strategic planning processes. One recommendation is addressed to the Chief Financial Officer and the remaining nine recommendations are addressed to the Director of Division of Information Resources Management (DIRM) and Chief Information Officer (CIO). The nine recommendations addressed to the Director, DIRM and CIO, are made in connection with his responsibilities as chairman of the IT Technical Committee and as a member of the IT Council.

#### **BACKGROUND**

The FDIC invested approximately \$217 million in IT resources during calendar year 1999. This amount represents approximately 18 percent of the Corporation's \$1.2 billion annual budget for 1999. The FDIC's IT budget for 2000 is approximately \$204 million. DIRM categorized approximately \$146 million of the \$204 million as "non-discretionary." Non-discretionary investments are those necessary to maintain the FDIC's IT program, including DIRM's ongoing operations, application maintenance, telecommunications, and mainframe and local area network operations. DIRM categorized the remaining \$58 million of the IT budget as "discretionary." Discretionary investments are intended to enhance FDIC operations but are not essential to

maintain the FDIC's IT program. They include new systems development, technical initiatives, and the completion of systems development and other initiatives started in prior years.

In addition, because of its growing significance in the IT budget, our report highlights an investment category that the FDIC identifies as "Other Development." The Technical Committee has defined Other Development as discretionary investments in new or existing systems that have individual budgets of less than \$200,000. The FDIC budgeted approximately \$12 million for Other Development projects for 2000. This amount represents an increase of 123 percent over the \$5.4 million approved in the 1999 IT budget. The large amount of resources that the FDIC invests in IT each year underscores the need for an effective IT decision-making process that ensures that these resources produce meaningful results and address the strategic goals and objectives of the Corporation.

Legislation such as the Clinger-Cohen Act (Clinger-Cohen) of 1996<sup>2</sup> and the Paperwork Reduction Act (PRA) emphasizes the need for federal agencies to establish efficient and effective processes for selecting, managing, and evaluating major investments in information systems. The Government Performance and Results Act (GPRA) requires agencies to set goals, measure performance, and report on their accomplishments. As such, an agency's IT investments should directly support the accomplishment of these goals. In addition, Clinger-Cohen requires agencies to adopt an investment process that provides for the continual identification, selection, control, life-cycle management, and results evaluation of IT projects. Clinger-Cohen also requires agencies to establish performance measures for IT investments to evaluate how well IT supports agency programs.

Government oversight agencies, such as the Office of Management and Budget (OMB) and the U.S. General Accounting Office (GAO), have issued reports and guidance to assist agencies in complying with the IT requirements of the referenced legislation. Based on the practices of leading public-sector and private-sector organizations, the OMB and GAO reports and guides define the following three basic phases for successful IT decision-making:

- **Selection** During the selection phase, organizations are instructed to set priorities and decide which IT projects will be funded. Cost, benefit, and risk factors should be considered and IT investments compared, ranked, and prioritized. Critical to the selection phase is the availability of accurate and up-to-date cost, risk, schedule, and benefit information.
- **Control** The control phase involves monitoring the progress of IT projects against projected costs, risks, schedules, and benefits. Decisions made during the control phase include whether to cancel a project, modify it to better meet mission requirements, accelerate development, or continue development as planned.

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<sup>&</sup>lt;sup>1</sup> The Other Development budget of \$12 million is included within the \$58 million discretionary budget.

<sup>&</sup>lt;sup>2</sup> The Clinger-Cohen Act of 1996 was formally known as the Information Technology Management Reform Act (ITMRA) of 1996.

• **Evaluation** - The third phase, evaluation, involves performing post-implementation reviews of fully implemented or canceled projects to analyze and compare costs, schedules, and benefits with what was actually experienced.

Project **selection**, **control**, and **evaluation** represent a continual, integrated management approach for managing IT investments.

To ensure a corporate perspective for IT strategic planning, the FDIC established an IT Council in 1996. The Council is responsible for providing strategic IT direction for the Corporation, reviewing and/or approving major IT initiatives, recommending an annual IT budget to the FDIC's Board of Directors, and measuring the performance of the FDIC's IT activities. The Council is chaired by the Deputy to the Chairman and Chief Operating Officer and is comprised of the directors of all of the FDIC's divisions, the Chief Financial Officer, and the General Counsel.

The FDIC also established an IT Technical Committee to provide support for the IT Council and to meet the Corporation's need for ongoing IT investment management and monitoring. The Technical Committee is responsible for evaluating and recommending approval of IT policies, managing key aspects of the IT budget, assessing the performance of major IT initiatives, and developing information to support IT Council decisions. The Technical Committee is chaired by the DIRM Director, who is also the FDIC's CIO, and is comprised of senior level managers representing all of the FDIC's divisions and offices.

The Technical Committee initiated the planning process to develop the 2000 IT budget in March 1999. The charter of the Technical Committee stipulates that meetings are to be held on a monthly basis, with additional meetings held as necessary to accomplish the committee's responsibilities. The committee met frequently throughout 1999 to discuss IT issues. For example, during the period July 1999 through September 1999, the Technical Committee met 15 times to discuss the FDIC's strategic needs and to develop the 2000 IT budget.

#### **OBJECTIVE, SCOPE, AND METHODOLOGY**

The objective of this audit was to evaluate the effectiveness of the FDIC's strategic planning process and practices related to acquiring, developing, and managing IT resources. Our audit evaluated the effectiveness of the FDIC's investment analysis process that was used to fund IT investments and establish their relative importance. The audit also evaluated the effectiveness of the FDIC's processes for monitoring and evaluating IT investments, including the procedures used to categorize IT projects. In addition, the audit evaluated the role of the IT Council and Technical Committee in managing the FDIC's IT investments and ensuring that strategic IT planning was performed from a corporate perspective.

To accomplish the audit's objective, we interviewed key DIRM staff and representatives of the FDIC's Technical Committee that were responsible for performing the FDIC's strategic IT planning. We also attended 2 IT Council and 24 Technical Committee meetings to observe whether and how IT investments were monitored, funded, and evaluated from a corporate

perspective. In addition, we reviewed key strategic planning documents, such as the FDIC IT Strategic Plan, division-level IT strategic plans, and DIRM's Annual Performance Plan to determine how the FDIC's IT program was being planned and monitored. We also reviewed key performance measurement documents, such as the Client IT Plans generated from DIRM's Lotus Notes database, DIRM status reports, and quarterly performance reports to evaluate the adequacy of performance measurement information being reported to FDIC management.

We reviewed cost, schedule, and risk data that was used to prioritize, fund, monitor, and evaluate the FDIC's IT investments. We also spoke with representatives of the General Services Administration (GSA) and GAO to determine how other federal agencies employ strategic planning to manage their IT programs. In addition, we reviewed key legislation, such as the Clinger-Cohen Act, PRA, and GPRA, to determine whether the FDIC's strategic IT planning process and practices satisfied the basic tenets of this legislation.

We conducted the audit between April 1999 and December 1999 in accordance with generally accepted government auditing standards. Our review focused on evaluating the IT planning process in a real-time mode as it was happening. We provided input and feedback to management on observations we had on the IT planning process throughout our review.

#### **RESULTS OF AUDIT**

The FDIC's IT strategic planning process has been evolving and improving since 1996 when the Corporation established the planning structure and process currently in use. The FDIC continued to implement significant improvements to its strategic IT planning process and practices during 1999. For the first time since its establishment in 1996, the Technical Committee was successful in developing a proposed IT budget that prioritized discretionary spending from a corporate perspective. That is, rather than each program office performing IT planning from a divisional or office perspective, the Technical Committee focused on prioritizing projects from a corporate perspective. Prioritizing IT investments has been recognized as a best practice of leading organizations and is a key tenet of recent IT legislation. The Technical Committee also developed a formal strategic IT direction with each FDIC division and implemented a post-implementation review (PIR) program to assess the quality of its system development projects and improve overall IT management.

Although the FDIC has made meaningful progress in selecting, managing, and evaluating its IT investments from a corporate perspective, opportunities for further improvement exist. Specifically, more attention to long-range strategic planning would allow the Technical Committee to consider alternative solutions to the FDIC's IT needs and result in a more substantive evaluation of IT spending. Planned control improvements to better control IT resource reallocations will help ensure that IT spending is based on corporate, rather than divisional, priorities.

In addition, improvements in how DIRM categorizes its IT investments would result in a more strategically focused IT budget that ensures IT spending is prioritized from a corporate perspective. Providing the Technical Committee with additional time and information during the

planning process can also improve planning and evaluation of IT investments categorized as "Other Development." Approximately \$12 million budgeted for Other Development initiatives for 2000 were not evaluated by the Technical Committee.

While the FDIC established formal strategic IT goals and objectives in the FDIC IT Strategic Plan, it needs to better measure its performance in accomplishing such goals and objectives. DIRM had not developed an ongoing mechanism for reporting overall IT performance information to the IT Council or Technical Committee. In addition, the FDIC was not tracking or reporting total life cycle costs on individual IT projects. Accordingly, it was not possible for the FDIC to compare actual costs and benefits with those estimated at the time a project was approved. Measuring performance against established goals and objectives is a fundamental principle of GPRA. Performance measurement information is critical for determining whether the FDIC's IT investments deliver promised benefits and meet the business goals and objectives of the Corporation. Performance measurement information also serves as an early indicator of potential problems and encourages managerial accountability by linking information about program outcomes to established goals.

Finally, because DIRM's PIR program was in the early stages of implementation at the time of our audit, we were unable to fully evaluate its effectiveness in improving the FDIC's IT management processes. However, we did identify opportunities for the FDIC to improve its PIR practices. Specifically, DIRM can ensure more meaningful evaluations of the FDIC's systems by focusing its limited PIR resources on a single type of PIR review. We also identified a need for greater independence of PIR team members and more detailed analysis and presentation of cost, schedule, and requirements projections.

## SIGNIFICANT PROGRESS MADE ON FDIC'S IT INVESTMENT ANALYSIS PROCESS; ADDITIONAL OPPORTUNITIES FOR IMPROVEMENT EXIST

The FDIC implemented significant improvements to its IT investment analysis process and used this improved process to develop the 2000 IT budget. For the first time since its establishment in 1996, the Technical Committee was successful in developing a proposed IT budget that prioritized discretionary IT spending from a corporate perspective. The Technical Committee prioritized discretionary IT spending by evaluating individual IT investments against a standard set of criteria. The criteria included consideration of the investment's cost, schedule and scope risk and its effectiveness in accomplishing FDIC's strategic goals, objectives and mission. Technical Committee members assigned numerical scores for each discretionary IT investment and averaged these scores to determine the investment's relative priority ranking. Prioritizing IT investments has been recognized as a best practice of leading organizations and is a key tenet of legislation related to the acquisition and use of IT resources.

The Technical Committee also developed a formal strategic IT direction with each FDIC division to identify key technology issues and requirements associated with the FDIC's business needs. Specifically, FDIC divisions developed long range strategic IT plans describing the data, application development, and technical architecture requirements that would be needed to

support their future business needs. Although the FDIC made meaningful progress in developing its IT investment analysis process, opportunities for further improvement exist.

Compressed timeframes associated with the Corporation's annual budgeting process limited the Technical Committee's ability to make long-term strategic IT decisions. The Technical Committee attempted to plan for the FDIC's strategic IT needs during the same 4-month time frame that it developed the 2000 IT budget and addressed other IT issues. In our opinion, allotting additional time for strategic planning will enhance the Technical Committee's ability to accomplish this work. Further, the FDIC's IT decision-making processes will be improved if long-range strategic IT planning is done before the corporate annual budgeting process begins.

Limited time also prevented the Technical Committee from performing a meaningful evaluation of major non-discretionary IT investments. Although DIRM provided the Technical Committee with a presentation of the FDIC's non-discretionary IT investments, the Technical Committee did not have an opportunity to evaluate alternative solutions for the FDIC's non-discretionary IT investments where appropriate. The information and documentation that was provided for non-discretionary IT expenditures was not as comprehensive as that provided for discretionary expenditures. The Technical Committee also did not have time to validate the consistency, reasonableness, or accuracy of cost and risk estimates underlying non-discretionary investments. In an effort to further improve the planning process, we plan to perform a separate review of DIRM's non-discretionary IT expenditures in 2000. This review will include an evaluation of how non-discretionary IT investments are selected, priced, and reported.

Improved controls over IT resource reallocations will also ensure that IT spending is based on corporate, rather than divisional, priorities. In addition, improvements in how DIRM categorizes its IT investments will result in a more strategically-focused IT budget and a more efficient IT funding process. Finally, procedures to evaluate and prioritize Other Development investments will ensure that IT spending is prioritized from a corporate perspective.

#### Long-Range Strategic Planning Can Enhance FDIC's IT Decision-making

DIRM and the Technical Committee planned for the FDIC's IT investments annually as part of the corporate annual budgeting process. During the period July 1999 through September 1999, the Technical Committee held 15 meetings to discuss the FDIC's strategic IT needs and develop the 2000 IT budget. During August 1999, the Technical Committee formally evaluated and prioritized 95 discretionary IT investments, valued at approximately \$84 million. During this same period, the Technical Committee received presentations from DIRM on an additional 99 non-discretionary IT investments totaling approximately \$146 million. Although the non-discretionary IT investment presentations provided the Technical Committee with valuable information, they did not contain the same level of detail as discretionary investments. For example, presentations of non-discretionary IT investments did not include 5 year life cycle cost and benefit estimates or a written plan describing the project. Technical Committee members planned and budgeted for the FDIC's IT investments while continuing to perform their regular program office duties.

The significant amount of analysis required to develop the 2000 IT budget, combined with compressed timeframes associated with the Corporation's annual budgeting process, limited the Technical Committee's ability to plan for the FDIC's IT needs beyond 2000. We believe that the FDIC can better ensure that its business goals and objectives are being addressed by performing long-range strategic IT planning before the corporate annual budgeting process begins. Developing long-term IT strategies at the beginning of the calendar year could also improve the efficiency and effectiveness of the IT budgeting process by allowing Technical Committee members to become more familiar with major IT investments before making funding decisions about them. Long-term planning strategies that could be considered by the Technical Committee, in conjunction with DIRM senior management, include the use of benchmarks or other measurements to evaluate the costs of DIRM's ongoing operations and application maintenance and the use of contractor versus in-house resources. Evaluating the cost-benefit of leasing versus purchasing hardware and software is another example of the type of strategies that could be considered if Technical Committee members had more lead-time.

Although the FDIC developed an annual long-range IT Strategic Plan, it needed to update the plan to reflect the FDIC's current IT priorities and strategies and to use the plan in the annual IT planning and budgeting process. Members of the Technical Committee agreed that long-range strategic IT planning was needed to ensure that the business needs of the Corporation were being addressed in an optimal manner. Expansion of long-range strategic IT planning will introduce new opportunities for DIRM to partner with the FDIC's program managers in making key IT decisions. We recognize that long-range strategic planning for all of the FDIC's major IT investments cannot be accomplished in one year. However, phasing in long-range planning, where appropriate, will allow for a more in-depth review of the FDIC's major IT investments on a less frequent basis.

Limited time during the IT planning and budgeting process prevented the Technical Committee from thoroughly evaluating the FDIC's non-discretionary IT investments. Non-discretionary investments included DIRM's ongoing operations, application maintenance, and other required expenditures to maintain the FDIC's IT program. Non-discretionary investments accounted for approximately 71 percent of the FDIC's proposed \$204 million IT budget for 2000.

While DIRM provided the Technical Committee with a presentation of the FDIC's non-discretionary IT investments, the Technical Committee relied almost exclusively on DIRM to develop and evaluate these investments. Members of the Technical Committee informed us that they were uncomfortable with some non-discretionary IT investments because alternative solutions were not presented. Instead, only one approach was presented to the Technical Committee. As an example, several Technical Committee members questioned whether alternatives existed for approximately \$12 million in non-discretionary investments related to security. These members felt that the FDIC may have been able to postpone the expenditure of some of these resources until 2001 or later to allow other discretionary IT projects on the prioritized list to be funded in 2000. However, they did not feel that they were provided enough information to formally question the non-discretionary budget items.

We recognize that some highly technical and complex decisions are best made by DIRM's technical experts. Additionally, DIRM's day-to-day operational activities should be addressed

by DIRM management. However, we believe there are major segments of the non-discretionary IT budget that the Technical Committee should evaluate more thoroughly. Expanding the planning process would provide the opportunity for DIRM to present cost-benefit information to the Technical Committee regarding options to be considered for significant non-discretionary investments.

Performing long-range strategic planning in advance of the actual IT budget process would allow the Technical Committee more time to independently review and validate the consistency, reasonableness, and accuracy of assumptions and estimates used to develop non-discretionary IT investments. Earlier planning would also afford the Technical Committee a better understanding of non-discretionary IT investments before funding decisions are made about them.

On November 9, 1999, the Technical Committee met to discuss how the IT investment analysis process might be improved in 2000. An additional meeting was held on December 9, 1999, wherein the Technical Committee decided to hold a series of weekly meetings beginning in January 2000 to identify and take early action on key strategic IT issues facing the Corporation. One strategic area that the Technical Committee planned to address was service level agreements (SLA)<sup>3</sup> with program divisions and offices for local area network and wide area network support. Changes in DIRM's current service levels could result in reduced levels of services and related cost reductions. The Technical Committee also planned to acquire a better understanding of cost elements comprising the application maintenance portion of the FDIC's non-discretionary IT spending. Maintenance represented approximately \$32 million of the FDIC's \$204 million IT budget for 2000. We believe these are positive steps that will further improve the IT planning process for 2001.

#### Recommendation

We recommend that the Director, Division of Information Resources Management and CIO:

(1) Work with the Technical Committee to implement a long-range strategic IT planning process that would provide the Committee the opportunity to become more involved in evaluating major components of the FDIC's annual IT budget at an earlier point in time.

#### **Better Controls Needed Regarding Reallocation of Funds for Approved IT Projects**

The FDIC's improved IT strategic planning process for calendar year 2000 prioritized discretionary IT investments from a corporate perspective. In prior years, IT investments were selected by FDIC program offices from a divisional perspective. That is, each division proposed and promoted its own IT investments, although projects from other divisions might have had a greater overall impact on the Corporation. The 2000 IT planning process required each Technical Committee member to evaluate and score all proposed projects based, in part, on the

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<sup>&</sup>lt;sup>3</sup> SLAs are formal documents that define a specific level of IT support to be provided for a client. SLAs allow IT personnel to focus on planning, service delivery, and providing program offices with expected levels of IT support.

project's importance in addressing the Corporation's strategic business goals and objectives. The revised process developed by DIRM and the Technical Committee reflects a substantial improvement in IT planning for the FDIC because it considers the merits of projects based on their ability to address the Corporation's strategic business goals and objectives.

While the FDIC made significant strides in its IT planning process this year, some portions of the process can be strengthened. We observed that in 1999 and prior years, program offices reallocated funds for IT projects within their program areas without the prior approval of the Technical Committee. Additionally, these reallocations were based on divisional, rather than corporate, priorities. For example, in June 1999 DOF identified six IT projects with a projected surplus of approximately \$1.4 million. DOF reallocated approximately \$1.1 million of the \$1.4 million to three other DOF projects and offered the remaining \$313,100 to the Division of Resolutions and Receiverships (DRR) for IT projects that needed additional funding. While DOF is to be commended for advising the Technical Committee of these reallocations, the notification was for informational purposes only. There was no requirement for DOF or any other division to obtain prior approval of fund reallocations from the Technical Committee. In addition, the reallocation of funds among the DOF projects and the transfer of \$313,100 to DRR were not based on a review of FDIC's IT needs from a corporate perspective. Rather, the reallocations were based on divisional perspectives.

GPRA and the Clinger-Cohen Act underscore the need for an IT investment decision-making process that addresses the strategic goals and objectives of an organization as a whole. Clinger-Cohen requires agencies to establish sound investment review processes for selecting, controlling and evaluating IT investments. According to Clinger-Cohen, IT managers should work with senior agency management to ensure that IT is effective and that it achieves the agency's strategic goals, objectives, and mission. GPRA requires agencies to establish strategic business goals and objectives and to measure how program activities accomplish those goals and objectives. In addition, the FDIC's own IT Strategic Plan identifies the need to view IT investments from a corporate-wide perspective to ensure effective IT planning and decision-making. Key to accomplishing a plan that is prioritized from a corporate perspective is ensuring that any subsequent adjustments or reallocations are also based on corporate, rather than divisional, priorities.

During the 1999 planning process for 2000, DIRM and the Technical Committee made significant progress in prioritizing IT investments from a corporate perspective. Further, during 2000 the Technical Committee intends to reallocate discretionary funds according to the prioritized list developed during the 2000 IT planning process. DIRM and the Technical Committee can further improve IT planning by developing formal policies and procedures to ensure that fund reallocations for all investment categories, including non-discretionary and Other Development, are based on corporate priorities. These policies and procedures should ensure that any fund reallocations are presented and reviewed from a corporate perspective and should restrict reallocation of funds without the Technical Committee's approval.

#### Recommendation

We recommend that the Director, Division of Information Resources Management and CIO:

(2) Develop policies and procedures that prescribe the parameters for when reallocations of IT resources require the Technical Committee's prior approval, to ensure that IT requirements continue to be addressed from a corporate strategic perspective.

#### **Procedures for Categorizing IT Investments Need Improvement**

DIRM established procedures for categorizing the FDIC's IT investments as either discretionary or non-discretionary as part of the 2000 IT investment analysis process. DIRM also spent considerable time during 1999 evaluating the FDIC's IT investments to ensure that they were properly categorized. However, DIRM can save valuable time during the IT budgeting process by building consensus among Technical Committee members regarding how IT investments should be categorized in advance of the actual project scoring and prioritization process. Advance agreement among Technical Committee members regarding IT investment categorizations will minimize unnecessary discussions during the time-sensitive budgeting process and ensure that only investment items intended for review are prioritized.

Valuable time was spent by the Technical Committee during the 2000 IT investment scoring and prioritization process discussing the appropriateness of various IT investment categorizations. To illustrate, some Technical Committee members believed that a discretionary IT investment valued at approximately \$1.4 million to provide voice telecommunication support for the FDIC's field offices should have been categorized as non-discretionary because providing voice services to the FDIC's field offices was required pursuant to an agreement negotiated between FDIC management and the National Treasury Employees Union. Additionally, several members of the Technical Committee did not agree that a non-discretionary investment valued at about \$6.1 million for online data services procured by the FDIC's library should be part of the IT budget. These members felt that recurring costs for electronic data and related subscriptions were services rather than IT expenses and that these costs should be placed under another part of the corporate budget.

Ambiguity regarding IT investment categorizations also hindered the Technical Committee's ability to evaluate approximately \$1.9 million in discretionary IT requirements. DIRM notified the Technical Committee on September 16, 1999 that it had misclassified discretionary items totaling \$1.9 million as non-discretionary. Because the Technical Committee had already evaluated and prioritized the FDIC's discretionary IT investments and time was limited, the Technical Committee did not have an opportunity to evaluate the \$1.9 million from a corporate perspective.

DIRM can help ensure that the Technical Committee develops a strategically-focused IT budget that prioritizes investments from a corporate perspective by improving IT investment categorizations before the annual project scoring and prioritization process begins. Improved procedures for categorizing IT investments will also provide members of the Technical Committee with the confidence that IT expenditures classified as non-discretionary are, in fact, necessary.

#### Recommendation

We recommend that the Director, Division of Information Resources Management and CIO:

(3) Work with members of the Technical Committee to improve existing procedures for categorizing IT investments as either discretionary or non-discretionary before the IT investment analysis process begins.

#### Procedures Needed to Prioritize "Other Development" Spending

As mentioned earlier, the FDIC had developed improved procedures for prioritizing discretionary IT spending. However, the FDIC can more strategically align its IT spending with the business goals and objectives of the Corporation by also developing plans to formally evaluate and prioritize IT investments categorized as Other Development. DIRM has defined investments in Other Development as discretionary expenditures in new or existing systems that individually are estimated to cost less than \$200,000.

The Technical Committee funded 23 Other Development projects<sup>4</sup> with a total value of approximately \$12 million for 2000. This amount represented an increase of about \$6.6 million (123 percent) over the approximate \$5.4 million that FDIC invested in Other Development for 1999. The Technical Committee had not projected what Other Development spending might be in 2001 or beyond. The \$12 million budget for Other Development represented approximately 21 percent of the \$58 million total discretionary budget for 2000. The Other Development budget of \$12 million was also equal in value to the projected cost of the first 15 unfunded IT projects on the prioritized list developed by the Technical Committee during the IT budget process.

Although the Technical Committee limited Other Development projects to those with budgets under \$200,000, it did not formally evaluate specific proposals for Other Development investments or explore how these investments would support the FDIC's business goals and objectives. The Technical Committee also did not formally evaluate or prioritize Other Development investments because of limited time during the budget preparation process and the large number of small dollar initiatives that comprised the Other Development category.

Technical Committee members that we spoke with agreed that controls were needed to ensure that investments in Other Development were strategically aligned with the FDIC's business goals and objectives. Because Other Development projects were not formally reviewed or evaluated, they are susceptible to potential requirements splitting to avoid the established \$200,000 threshold for formal IT project review and evaluation. In addition, because of the rapidly growing value of investments categorized as Other Development, we believe that procedures developed by the Technical Committee should ensure that Other Development projects are fully evaluated and prioritized. Efforts to evaluate and prioritize Other Development spending should be commensurate with the dollar value of the individual initiatives.

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<sup>&</sup>lt;sup>4</sup> The 23 Other Development projects included in the 2000 IT budget contained over 100 separate initiatives valued at under \$200.000 each.

#### Recommendation

We recommend that the Director, Division of Information Resources Management and CIO:

(4) Develop plans to formally evaluate and prioritize IT investments categorized as "Other Development."

### IMPROVEMENTS NEEDED IN IT PERFORMANCE MEASUREMENT AND REPORTING

The FDIC has established formal strategic IT goals and objectives in the FDIC IT Strategic Plan. However, opportunities exist for the FDIC to improve its performance measurement in accomplishing these goals and objectives. In addition, DIRM is not reporting overall IT performance information to the IT Council or Technical Committee, as required by the charters for these organizations. Finally, performance indicators used by DIRM to measure and report performance on individual IT projects can be improved.

Evaluating the results of the FDIC's IT investments is critical to ensuring accountability and determining the impact that IT has on the FDIC's business activities and mission. It is also a basic tenet of GPRA. GPRA requires agencies to establish strategic business goals and objectives and to measure how program activities accomplish these goals and objectives. In addition, the Clinger-Cohen Act mandates that federal agencies measure the contribution of their IT investments to mission results. Performance measurement information is also critical for ensuring that IT projects are implemented at acceptable costs, within reasonable and expected timeframes, and meet user requirements.

#### **Need for Overall IT Performance Measurement and Reporting**

DIRM and its client divisions and offices established formal strategic IT goals and objectives for the Corporation in the FDIC's IT Strategic Plan. Developed in early 1998, the IT Strategic Plan contains six major IT goals intended to support the FDIC's major program areas over the next 3 to 5 years. The IT Strategic Plan identifies the strategies and initiatives that the FDIC will pursue to accomplish the six strategic goals. In addition, DIRM established an annual performance plan that describes DIRM's performance goals and targets for 1999.

Although the 1998 IT Strategic Plan identifies six major strategic goals, the FDIC has done little to measure its performance in achieving these goals. We noted that only one of the six goals contained in the IT Strategic Plan, remediating the Year 2000 (Y2K) problem, was being measured and reported to senior management on a routine basis. The FDIC's progress in remediating the Y2K problem was being reported to senior management on a quarterly basis as part of an established process for measuring and reporting on goals contained in the

Corporate Annual Performance Plan.<sup>5</sup> Comprehensive briefings on the FDIC's status of implementing the goals contained in the Corporate Annual Performance Plan were also made to the Corporation's Operating Committee on a semiannual basis. The five IT goals not being measured or reported were (1) improving customer satisfaction with application systems, (2) reducing corporate costs through the use of IT, (3) managing corporate information, (4) providing a stable IT infrastructure, and (5) improving the efficiency and effectiveness of IT management.

The Technical Committee initially attempted to monitor the FDIC's overall IT performance in January 1997 when it identified 21 key IT projects for special review. These projects were selected because of their high visibility and importance to the Corporation. In February 1998, the Technical Committee reduced the number of key projects being monitored from 21 to 11. Prior to the initiation of our fieldwork in April 1999, the Technical Committee had discontinued monitoring key IT projects completely.

DIRM management indicated that it discontinued the monitoring effort because the Technical Committee did not find the format of the information to be useful. In addition to being voluminous, the information did not clearly discuss problems or risk areas associated with IT investments. The Technical Committee's monitoring of key IT projects did not include measuring the FDIC's overall performance in the accomplishment of the six goals contained in FDIC's IT Strategic Plan. During our fieldwork, no overall IT performance measurement information was being reported by DIRM to the IT Council or Technical Committee.

Performance measurement is a process whereby an organization objectively and quantifiably measures how it is accomplishing its goals and objectives through the delivery of products, services, or processes. IT performance measurement encourages managerial accountability by linking information about program outcomes and results to established goals. Effective IT performance measurement serves as an early warning indicator to correct problems. It also provides management and stakeholders with periodic feedback about the quality, quantity, cost, and timeliness of IT products and services. Without meaningful performance measurement information, the FDIC is unable to effectively ensure that its IT investments deliver the benefits projected at the cost and within the timeframes promised. Performance measurement information is also critical for satisfying the requirements of key IT legislation, including the Clinger-Cohen Act and GPRA.

Measuring performance against established goals and objectives is also a basic tenet of GPRA. GPRA requires agencies to prepare annual performance plans covering each program activity set forth in the budget. The plans are intended to establish performance goals in an objective, quantifiable, and measurable format. The plans also identify performance indicators to be used in measuring relevant outputs, service levels, and outcomes of each program activity. GPRA also requires that agency heads annually prepare and submit program performance reports, setting forth performance indicators and comparing actual program performance against the

<sup>&</sup>lt;sup>5</sup> The Corporate Annual Performance Plan implements the FDIC Strategic Plan and defines what will be accomplished during the year to achieve FDIC's strategic goals and objectives. The Corporate Annual Performance Plan is augmented by individual division and office plans.

performance goals, to the President and the Congress. Assessing IT performance in support of agency programs is also a cornerstone element of the Clinger-Cohen Act.

The charters of the IT Council and Technical Committee require periodic assessments of the overall performance of the FDIC's IT program and major initiatives. Members of the Technical Committee that we spoke with recognized the need to begin assessing the FDIC's overall IT performance on a regular basis. In addition, DIRM staff responsible for performing strategic IT planning informed us that they had discontinued reporting performance information to the Technical Committee while they researched alternative performance measurement strategies.

We believe that DIRM and its client divisions and offices should begin assessing the FDIC's progress in accomplishing the goals outlined in the IT Strategic Plan as soon as possible. This information should be provided to the IT Council, Technical Committee, and senior management for assessing the strategic direction and progress of the FDIC's IT program. Timely measurement, assessment, and reporting of performance is key to improving future IT decision-making and ensuring that IT enhances mission performance.

#### Recommendation

We recommend that the Director, Division of Information Resources Management and CIO:

(5) Validate the goals and objectives contained in the FDIC's IT Strategic Plan and begin measuring performance against these goals and objectives. DIRM should report this performance measurement information to the Technical Committee, IT Council, and senior FDIC management.

#### **Improvements Needed in Measuring Performance on Individual IT Projects**

DIRM established a centralized process for tracking and reporting critical information on the FDIC's individual IT investments. However, the process needed to be enhanced to provide more comprehensive and meaningful information regarding the performance of these investments.

DIRM representatives responsible for performing strategic IT planning informed us that they were evaluating alternative approaches for measuring progress on individual IT investments and for reporting this information to senior DIRM management and the Technical Committee. One approach being considered would alert successively higher levels of DIRM management to potential problems, with the Technical Committee becoming involved only when significant problems persist. Comparing completed requirements with project expenditures is another approach that the FDIC could employ to measure progress on the FDIC's IT projects. Effective IT performance measurement is embodied in the basic tenants of the Clinger-Cohen Act and GPRA. It is also promulgated in GAO and OMB guidelines for managing IT investments.

Senior DIRM management and DIRM project managers that we spoke with indicated that performance measurement information generated by DIRM's project monitoring process did not meet their needs. In addition, the process did not capture critical information needed to effectively measure progress on IT projects, such as program office and life cycle cost data. In

addition, information that compared the progress of implementing actual deliverables with what was promised at the time that a project was approved was also not being captured or reported. Without complete and accurate performance measurement information, DIRM managers did not have the ability to effectively monitor the FDIC's IT investments or identify potential problems in a timely manner.

The centralized process that DIRM used to track critical IT project information, such as project status, budget, expenditure, and schedule data, was maintained in a centralized Lotus Notes database. DIRM project managers periodically updated the Lotus Notes database to reflect the current status and schedule of their projects. An interface with the DIRM Budget Support System also allowed the database to track DIRM's budget and expenditure information for each IT project. Standard reports generated from the Lotus Notes database also reported the status of projects and identified projects with significant deviations between planned and actual expenditures and milestone dates.

Although the Lotus Notes database contained useful information about the FDIC's IT projects, it did not provide complete and comprehensive information regarding the progress of these projects. DIRM project managers that we spoke with did not use the Lotus Notes database to manage their IT projects because the data was not detailed enough, and expenditure information was not current. In addition, the Lotus Notes database did not maintain a history of changes that were made to IT project schedules and budgets or the reasons why these changes were made.

DIRM project managers stated that standard exception reports generated by the Lotus Notes database relating to expenditures were sometimes misleading and were not a meaningful tool for measuring progress on their IT projects. One such report identified IT projects that were over budget by comparing a project's annual budget to its actual expenditures. Deviations of 50 percent or more between a project's budget and actual expenditures were flagged as a potential problem. However, budget figures were not adjusted in a timely manner when projects were started earlier or later than originally planned. Accordingly, the comparison of original budgeted amounts to actual expenditures that were experienced over a longer or shorter period of time sometimes resulted in the incorrect reporting of significant over-budget or under-budget situations. This caused some IT projects to be flagged for potential budget problems when, in fact, they did not have any.

The 50-percent budget deviation threshold established by DIRM was, in our opinion, too high. Use of such a high threshold would detect problems after they occur rather than providing advance information to allow for more immediate management action. In addition, the Lotus Notes database did not generate standard exception reports for all IT project categories. For example, maintenance projects, which represented approximately \$35 million, or 17 percent, of the FDIC's \$211 million IT budget for 1999, were not monitored by the Lotus Notes database for schedule, budget, or expenditure variances. DIRM project managers informed us that they used other tools to manage and track progress on their IT projects, including Microsoft Project and detailed budget reports. Senior DIRM management agreed that the standard exception reports generated by the Lotus Notes database were not an effective indicator of progress on the FDIC's

<sup>&</sup>lt;sup>6</sup> Lotus Notes is a registered trademark of Lotus Development Corporation.

IT investments. Senior management indicated that the system incorrectly flagged many projects as experiencing problems and, therefore, was not reliable or useful.

Program office costs incurred in connection with IT projects were also not being consistently recorded, tracked, or reported. In many cases, the program offices involvement and costs were significant. DIRM generated monthly reports from the Financial Information Management System (FIMS) that identified program office hours charged to specific IT projects and provided these reports to members of the Technical Committee. However, most members of the Technical Committee informed us that they did not use these reports because they did not translate program office hours into financial terms and the reports did not combine or associate the program charges with the appropriate DIRM projects. Members of the Technical Committee also informed us that program offices were not consistently charging hours to IT projects. As a result, program office cost data generated by FIMS may be incomplete.

In addition, we noted that full life cycle (i.e., inception-to-date) cost data was not being tracked or reported on IT projects. DIRM developed the capability to track its expenditures and commitments against approved IT budgets in 1997 using a Lotus Notes database. The Lotus Notes database reported on year-to-date DIRM expenditures. In 1998, DIRM enhanced the Lotus Notes database to also report on year-end costs for the immediately preceding year. For projects that were ongoing in more than 2 calendar years, only the most current year-to-date and previous year's DIRM costs were reported. The database was used primarily to ensure that DIRM's current annual budgets for IT projects were not exceeded.

In 1997 DIRM implemented a comprehensive process to ensure that all DIRM personnel and contractor costs are charged to a valid IT project code, including new systems development, maintenance, and other development. DIRM implemented the referenced process as a control for ensuring that all costs are accurately charged to a valid project code. Each month, DIRM generates detailed reports from FIMS that identify the personnel, contract, and other charges made to all IT project numbers. DIRM's Fiscal Management Section screens the FIMS reports to ensure that valid project numbers are charged for all costs. Detailed reports of all charges to project numbers are then sent to DIRM project managers to ensure that all charges are valid and accurately recorded.

DIRM had implemented an effective process to ensure that all DIRM personnel and contractor costs were charged to valid IT projects. However, similar controls are needed to ensure that program office and non-DIRM contract costs are also tracked and reported against the IT project numbers they relate to. Unless full life cycle cost data is tracked, analyzed, and reported, its benefit to the FDIC's management decision-making process is limited. While the Lotus Notes database provides useful DIRM cost information, it would be more beneficial if complete life cycle costs, including program office costs, were tracked.

We reported on the need to track and report program office and full life cycle costs in an OIG report entitled *Audit of FDIC Resource and Cost Tracking Systems for Information Systems Projects* (Audit Report No. 98-019), dated February 27, 1998. We recommended in this report that DIRM and the Division of Finance (DOF) work with representatives of the FDIC's program offices to develop a capability to track and report total costs associated with IT projects,

including program office costs. We also recommended that DIRM begin tracking and reporting full life cycle costs on all IT projects.

In response to these recommendations, DIRM and DOF management agreed to implement a pilot program to track total life cycle costs in one division, DOF. Based on the results of the pilot and the FDIC's adoption of new capital accounting procedures in 1999, DOF issued formal procedures requiring all divisions and offices to begin recording and tracking full life cycle costs on IT projects in 1999. However, the FDIC has not yet implemented effective controls to ensure that program offices charged costs to the appropriate IT project code. Technical Committee members and DIRM management officials that we interviewed indicated that program offices were not consistently charging IT projects with program office personnel and other costs such as travel and training. In addition, the FDIC was not yet tracking and reporting all life cycle costs for IT projects.

In our opinion, the Chief Financial Officer should consider implementing corporate-wide controls similar to those instituted by DIRM to ensure that all IT costs are charged to the appropriate IT project code. In addition, DIRM needs to implement a tracking system that captures all life cycle costs for IT projects and that regularly compares actual costs and progress to date with approved budgets and timelines for implementation.

If life cycle program office costs are accumulated along with DIRM IT expenditures and reported to senior management, the information can provide additional benefits to the FDIC's IT decision-making processes. Full life cycle cost data is a necessary component of any successful performance measurement and post-implementation review program. In addition, the Clinger-Cohen Act requires agencies to establish processes that ensure IT projects are being implemented at acceptable costs, within reasonable and expected time frames, and are contributing to tangible, observable improvements in mission performance. Moreover, these agency processes should be institutionalized throughout the organization and should be used for all IT-related decisions. The FDIC IT Strategic Plan also cites expanding IT cost accounting to include total corporate costs as a good management practice. Accordingly, we are reiterating our recommendation to track and report full life cycle costs on IT projects, including program office costs.

#### Recommendations

We recommend that the Director, Division of Information Resources Management and CIO:

(6) Work with the Technical Committee to establish a centralized process for measuring performance on individual IT investments and report this information on a routine basis to senior DIRM management and the Technical Committee.

We recommend that the Chief Financial Officer:

(7) Work with the FDIC's divisions and program offices to ensure that full life cycle costs associated with the FDIC's IT investments, including program office costs, are tracked, reported, and compared to initial estimates.

#### **Opportunities for Improvements in the Post Implementation Review Process**

DIRM implemented a Post Implementation Review (PIR) program with the objective of assessing the quality of its system development projects and improving overall IT investment management. The PIR program was designed to provide a wide range of information on product quality, customer satisfaction, and project management capability to develop a corporate-wide perspective for process improvement.

We performed a limited evaluation of the PIR methodology and have several observations and recommendations where we believe there are opportunities for improvement. We were unable to complete a more comprehensive evaluation of the PIR program because of its relatively recent implementation and the fact that few reviews have been completed. We plan to schedule a more comprehensive evaluation of the PIR process after the FDIC has had an opportunity to complete more reviews.

The improvements that we believe can be made relate to better ensuring the independence and objectivity of the PIR teams, limiting the PIR process to one level or type of review, and ensuring that all life cycle costs are tracked. In addition, improvements can be made by developing PIR procedures that require a more detailed analysis and presentation of cost, schedule, and requirements projections.

DIRM planned to complete 10 PIRs during 1999. Eight of the reviews planned for 1999 were incomplete at the time of our review. One additional review was completed that was not included on the list of planned 1999 PIR reviews. While 6 PIRs had been completed since the inception of the program in 1998, 3 were pilots completed by DIRM and its clients, with oversight provided by DIRM's IT Evaluation Section. Of the 3 other reviews that were completed, one deviated from normal PIR evaluation procedures by excluding input from a statistically valid sampling of users. DIRM officials stated that the review related to a DOS application that was scheduled for a second PIR by year-end 1999. DOS and DCA clients expressed concern about the potential examiner response burden associated with two surveys of the same system in the same year, especially in light of Y2K considerations.

We interviewed DIRM management officials that were involved with the PIR program and DIRM project managers. Based on the interviews, we determined that PIR teams sometimes included individuals that were also involved in the development project. In addition, in at least four instances, PIR team members, although not directly associated with the project that was reviewed, worked for the DIRM project manager responsible for the project being reviewed. This team composition is not in accordance with basic internal controls dealing with separation

of responsibility and could impact the reliability of the results because of questions that could be raised about the objectivity and independence of the team members.

Paragraph 1.4.5 of the PIR Methodology Manual states that DIRM and Program Office team members should not be selected from the same sections that were responsible for the project. In our opinion, this language should be strengthened to require that PIR team members not be selected from sections involved in the project.

DIRM's PIR Methodology Manual provided for three different types of PIR reviews. A Level I PIR evaluated projects while they were in process and involved a review of requirements through design. A Level II review evaluated projects shortly after implementation while a Level III review designated an evaluation 9 – 12 months after implementation. DIRM management officials stated that the Level I PIR review was eliminated during the period of March through June 1999. We believe that DIRM could make more efficient use of limited resources if they limited the PIR process to one type of review rather than the multiple levels of review that are now included in the PIR Methodology Manual. Also, while PIR procedures required a comparison of original cost and schedule projections with actual figures, it was not possible to accurately make such comparisons, because the FDIC did not track total life cycle costs (including program office costs). Although program office and other non-DIRM cost projections were included in original budget estimates, these cost elements were not tracked. Accordingly, this analysis provided limited benefits. The PIR process could also be enhanced if information was included in the PIR report that illustrated when cost and schedule overruns occurred, if and when they were approved, and the reason for the change.

Based on our review of the 6 PIR reports that DIRM completed at the time of our review, we believe there is a need for a more comprehensive analysis and presentation of cost, schedule, and deliverables. The PIR reports we reviewed did contain some summary information that compared final DIRM cost and schedule information with original projections. However, we believe the PIR reports could be more useful if a more detailed presentation was provided that compared functional requirements with what was actually delivered. User questionnaires and interviews with program office staff can be useful in determining whether users are satisfied and whether they believe their needs were satisfied. However, an independent evaluation is needed that compares what was originally required/promised to what was ultimately delivered to determine if all requirements were satisfied. Users asked about their satisfaction with the system delivered may not know what the original requirements were at the time of project approval.

Accordingly, we believe the PIR procedures manual and handbooks need to be expanded to provide for a more comprehensive analysis and presentation of life cycle costs, schedule, and requirements that were projected at the time a project was originally approved by senior management. In addition, the PIR report should identify approved changes to the cost, schedule, and requirements that occurred throughout development. The Technical Committee and DIRM need this information to identify problem projects and ultimately the cause so that similar problems can be avoided or addressed in the future.

The PIR final report should provide a comprehensive comparison of final actual cost, delivery date, and functionality delivered to what was originally projected. In our view, absent this type of analysis and information, it is not possible to make a reliable determination of whether the system that was delivered is what was promised and whether it was delivered for the cost and within the timeframe originally promised.

#### Recommendations

We recommend that the Director, Division of Information Resources Management and CIO:

- (8) Work with the Technical Committee to implement procedures that ensure individuals performing PIR reviews are not involved with the development of the project and are not supervised by anyone that was involved with the project that is being reviewed.
- (9) Consult with the Technical Committee and consider changing PIR procedures so that there is only one type of PIR review conducted after a system has been fully implemented and has been operational for a period of time.
- (10) Work with the Technical Committee to implement procedures that require the PIR process to include more comprehensive information in the final PIR report regarding a comparison of original and final cost and schedule information. The PIR report should also provide explanations for changes that occurred and for differences between actual and approved budgets, schedules, and deliverables.

#### **CONCLUSION**

The FDIC has made significant progress towards improving the investment analysis and post-implementation review process for IT investments. The improvements suggested in this report are designed to further enhance many of the improvements that the FDIC has already initiated. Our recommendations should enable the Corporation to better ensure that scarce IT resources are invested in the projects that help the Corporation achieve its most critical strategic business objectives. In addition, improvements suggested in the performance measurement and post-implementation review process will ensure that critical information is available to measure performance and establish accountability for the effective and efficient consumption of IT resources.

#### CORPORATION COMMENTS AND OIG EVALUATION

On March 23, 2000 the Director, DIRM provided a written response to the draft report. The DIRM Director responded to recommendations 1-6 and 8-10. Recommendation 7 in the draft report was addressed to the Chief Financial Officer (CFO). The Director, Division of Finance (DOF), provided a written response through the CFO to recommendation 7, on March 30, 2000. The DIRM Director's response is presented in Appendix I of this report and the DOF/CFO response is presented in Appendix II. The Director, DIRM and the DOF/CFO agreed with the recommendations

addressed to each of their respective organizations. A summary of DIRM's and the CFO's responses to the recommendations contained in this report follows.

Regarding recommendation 1, the Director, DIRM stated that the IT Technical Committee and various subcommittees are pursuing improvement of the investment analysis process. These improvements include better integration of IT planning and corporate business planning, better timing of IT planning activities, and enhanced project type definitions.

The DIRM Director also agreed with recommendation 2 and indicated that DIRM had undertaken steps to implement IT budget reallocations in a standardized, business-focused manner. The IT Technical Committee will review requests for funding, along with opportunities to reallocate funds, during April and July each year. The reallocation decisions will focus on items on the ranked list developed as part of the prior year's planning effort, along with special requests for new or increased funding.

Concerning recommendation 3, DIRM stated that it has undertaken work through the IT Technical Committee to implement the recommendation. An IT Technical Committee subcommittee has reviewed both the definitions and handling of the various project types. The Committee's preliminary recommendations were presented on March 2, 2000 to the IT Technical Committee. Committee input is being solicited and final procedures for categorizing IT investments will be developed later in 2000, in time to support IT planning for 2001.

Regarding recommendation 4, DIRM responded that the IT Technical Committee has formed a subcommittee that will formulate recommendations for improved evaluation of "Other Development" to ensure that this category of projects is dealt with appropriately.

Pertaining to recommendation 5, DIRM stated it was identifying performance indicators that provide information on DIRM's progress in achieving IT strategic goals and objectives. Information from these indicators will serve as the basis to develop a performance measurement program to improve IT practices, environments, and services; to identify risk areas; and to identify future measurable goals and objectives.

In its response to recommendation 6, DIRM stated it began providing the IT Technical Committee monthly financial status reports for IT projects in March 2000 to provide the information needed to support its ongoing monitoring of IT projects.

Regarding recommendation 7, DOF and the CFO proposed an interim solution to address the recommendation until a long-term solution could be implemented through a financial modernization project that is currently underway. As an interim measure, DOF will initiate a program in conjunction with DIRM to collect budgets and expenses for development projects, using DIRM's project based version of Pillar for the 2001 budget formulation.

Recommendations 8 through 10 relate to opportunities for streamlining and improving the PIR process. DIRM responded that it agreed with each recommendation. DIRM stated IT would recommend the suggested changes in the methodology to the IT Technical Committee. If approved, DIRM said IT would make the necessary documentation changes.

The Corporation's response to the draft report provides the elements necessary for management decisions on each of the report's recommendations. Accordingly, no further response to this report is required.

March 23, 2000

**TO:** David H. Loewenstein

**Assistant Inspector General** 

**FROM:** Donald C. Demitros, Director and Chief Information Officer

**SUBJECT:** <u>DIRM Management Response to the Draft OIG Report Entitled, "Audit of the</u>

FDIC's Strategic Planning for Information Technology Resources

(Audit No. 99-902)

The Division of Information Resources Management (DIRM) has reviewed the draft audit report and, in general, agrees with the findings and recommendations. Responses to each of the OIG's specific recommendations are provided as Attachment 1. The recommendation pertaining to the Chief Financial Officer (CFO) is being addressed under separate cover by the CFO.

Please address any questions to DIRM's Audit Liaison, Rack Campbell, on (703) 516-1422.

Attachment

### SIGNIFICANT PROGRESS MADE ON FDIC'S IT INVESTMENT ANALYSIS PROCESS, ADDITIONAL OPPORTUNITIES FOR IMPROVEMENTS EXIST

#### Recommendations

#### Long-Range Strategic Planning Can Enhance FDIC's IT Decision-making

We recommend that the Director, Division of Information Resources Management and CIO:

(1) Work with the Technical Committee to implement a long-range strategic IT planning process that would provide the Committee the opportunity to become more involved in evaluating major components of the FDIC's annual IT budget at an earlier point in time.

Corrective Action: In 1999 DIRM implemented a successful investment analysis process. This process is based on client-developed IT strategies related to business activities, goals, and priorities. During the investment analysis process, FDIC divisions developed their respective IT strategies and briefed both the IT Technical Committee and key DIRM staff about their strategies. This activity provided the foundation for development of data, application and technical strategies, as well as for analysis of specific investments. The timing of this important foundation work was delayed in 1999 by the time required to define and gain senior FDIC management approval of the process. The need to begin the process earlier in future years was generally recognized at that time.

During June and July 1999, the client IT strategies and the DIRM-developed data, application, and technical strategies were used as the basis for defining a variety of application and technical initiatives to be proposed for the 2000 IT budget. During the project evaluation process, it became apparent that more time was needed for IT Technical Committee members to assimilate and understand all the IT budget information.

In order to allow the IT Technical Committee more time to understand all elements of the IT budget, DIRM is pursuing two types of improvements during 2000. To improve the IT Technical Committee's understanding of the IT operating budget, DIRM has initiated briefings on technical operations. These briefings, which began in February and will continue as needed through the Spring, are focused on ensuring that the IT Technical Committee members understand what constitutes the various types of operations. These briefings also will provide the foundation for development, in 2000 and later years, appropriate service level agreements that will ensure that operational activities and their attendant costs are properly focused.

The IT Technical Committee is taking positive steps to improve the investment analysis and allow for more review by members. Ongoing discussions within the Committee and in various subcommittees are pursuing improvement of the investment analysis process. These steps include better integration of IT planning and corporate business planning, better timing of IT planning activities, and enhanced project type definitions (along with improvements in how projects are determined to be discretionary and non-discretionary). The revised processes will be described in the instructions provided to DIRM staff at the start of the 2001 budget formulation cycle. Taken together these improvements should result in improvements in both the IT Technical Committee's ability and time to evaluate investments and the quality of that evaluation.

Planned Corrective Action: June 30, 2000

#### Better Controls Needed Regarding Reallocation of Funds for Approved IT Projects

We recommend that the Director, Division of Information Resources Management and CIO:

(2) Develop policies and procedures that prescribe the parameters for when reallocation of IT resources require the Technical Committee's prior approval, to ensure that IT requirements continue to be addressed from a corporate strategic perspective.

Corrective Action: DIRM agrees with the recommendation and had previously undertaken steps to implement budget reallocation in a standardized, business-focused manner. Essentially, the IT Technical Committee will review requests for funding, along with opportunities to reallocate funds, during April and July each year. The reallocation decisions will focus on items on the ranked list developed as part of the prior year's planning effort, along with special requests for new or increased funding. The procedures for this effort will be complete and tested during the reallocation in April 2000. They will then be refined, if necessary, for use in subsequent reallocations.

Planned Corrective Action: July 15, 2000

#### **Procedures for Categorizing IT Investments Need Improvement**

We recommend that the Director, Division of Information Resources Management and CIO:

(3) Work with members of the Technical Committee to improve existing procedures for categorizing IT investments as either discretionary or non-discretionary before the IT investment analysis process begins.

Corrective Action: DIRM agrees with the recommendation and has undertaken work through the IT Technical Committee to achieve this goal. An IT Technical Committee subcommittee has reviewed both the definitions and handling of the various project types. Their preliminary recommendations were presented on March 2 to the IT Technical Committee. Committee input is being solicited and final procedures for categorizing IT investments will be developed later this year, in time to support IT planning for 2001.

Planned Corrective Action: June 30, 2000

#### **Procedures Needed to Prioritize Other Development Spending**

We recommend that the Director, Division of Information Resources Management and CIO:

(4) Develop plans to formally evaluate and prioritize IT investments categorized as Other Development.

**Corrective Action:** DIRM agrees with the OIG's concern about the amount of funding devoted to "Other Development" projects in 2000 without benefit of ranking or other meaningful IT Technical Committee evaluation. The subcommittee activity noted above includes recommendations for improved evaluation of "Other Development" to ensure that this category of projects is dealt with appropriately.

Planned Corrective Action: June 30, 2000

### IMPROVEMENTS NEEDED IN IT PERFORMANCE MEASUREMENT AND REPORTING

#### Recommendations

#### **Need for Overall IT Performance Measurement and Reporting**

We recommend that the Director, Division of Information Resources Management and CIO:

(5) Validate the goals and objectives contained in the FDIC's IT Strategic Plan and begin measuring performance against these goals and objectives. DIRM should report this performance measurement information to the Technical Committee, IT Council, and senior FDIC management.

**Corrective Action:** DIRM agrees with the recommendation. DIRM currently publishes a long range (five-year) IT Strategic Plan. In February, the DIRM Principal Staff met to draft updates to the IT goals and objectives that are key to the Plan. These will be completed in late March.

DIRM also is identifying performance indicators that provide information on DIRM's progress in achieving IT Strategic Goals and Objectives. Information about these indicators will serve as the basis to develop a performance measurement program to improve IT practices, environments and services; to identify risk areas; and to identify future measurable goals and objectives. Once developed, the performance measurement information will be provided to the IT Technical Committee on a regular basis.

DIRM Principal Staff will meet in May 2000 to establish a plan to improve performance indicators for the 2000 IT Strategic Goals and to provide direction for establishing a long term plan for an effective performance measurement program.

Planned Corrective Action: January 31, 2001

#### **Improvements Needed in Measuring Performance on Individual IT Projects**

We recommend that the Director, Division of Information Resources Management and CIO:

(6) Work with the Technical Committee to establish a centralized process for measuring performance on individual IT investment and report this information on a routine basis to senior DIRM management and the Technical Committee.

Corrective Action Completed: DIRM agrees with the recommendation. DIRM continues to work with the IT Technical Committee to provide the information that they need to support their ongoing monitoring of IT projects. Improvements already in place include the provision of monthly financial status reports (available as of March 2000) for IT projects. The IT Technical Committee also has access to status reports on each of the ongoing initiatives and can review these at any time using the Client IT Plan Lotus Notes application. Both the financial and initiatives status reports will provide essential information for addressing the reallocation of funds in April and July each year.

We recommend that the Chief Financial Officer:

(7) Work with the FDIC's divisions and program offices to ensure that full life cycle costs associated with the FDIC's IT investments, including program office costs, are tracked, reported, and compared to initial estimates.

**Planned Corrective Action:** CFO will respond to this recommendation under separate cover.

#### **Opportunities for Improvements in the Post Implementation Review Process**

We recommend that the Director, Division of Information Resources Management and CIO:

(8) Work with the Technical Committee to implement procedures that ensure individuals performing PIR reviews are not involved in the development of the project and are not supervised by anyone that was involved with the project that is being reviewed.

**Corrective Action:** DIRM agrees with the recommendation. DIRM will recommend this change in the methodology to the Technical Committee. If approved, DIRM will make the necessary documentation changes and issue a memorandum to DIRM Application Systems Management and all Program Managers reinforcing this revision by June 30, 2000.

Planned Corrective Action: June 30, 2000

(9) Consult with the Technical Committee and consider changing PIR procedures so that there is only one type of PIR review conducted after a system has been fully implemented and has been operational for a period of time.

**Corrective Action:** DIRM agrees with the recommendation. DIRM will recommend this change to the Technical Committee. If approved, DIRM will make the necessary documentation and program changes by March 31, 2001 for the 2001 cycle of PIRs.

Planned Corrective Action: March 31, 2001

(10) Work with the Technical Committee to implement procedures that require the PIR process to include more comprehensive information in the final PIR report regarding a comparison of original and final cost and schedule information. The PIR report should also provide explanations for changes that occurred and for the differences between actual and approved budgets, schedules and deliverables.

Corrective Action: DIRM agrees with the recommendation. DIRM will add more comprehensive information in the final PIR reports with regard to original and final cost and scheduled information as that information becomes available. DIRM's ability to include total life cycle cost data is solely dependent upon the availability of that data, particularly client costs. The results of actions taken to address recommendation #7 will determine the extent to which DIRM can incorporate this information into the PIR analysis and reporting. As direction is established by the CFO to address the availability of total life cycle cost data, DIRM will work with its clients to ensure the inclusion of this data into the PIR program.

Division of Finance

March 30, 2000

**MEMORANDUM TO:** David H. Loewenstein

Assistant Inspector General

THROUGH:

Chris Sale

Deputy to the Chairman and Chief Financial Officer

FROM: Fred Selby

Director, Division of Finance

Draft Report Entitled Audit of the FDIC's Strategic Planning for **SUBJECT:** 

*Information Technology Resources* (Audit No. 99-902)

The Chief Financial Officer agrees with recommendation number 7 that we work with the FDIC's business units to ensure that full life cycle costs associated with FDIC's IT investments, including program office costs, are tracked, reported, and compared to initial estimates. The Division of Finance (DOF) is currently working on a long-term financial modernization project. The results of that project will address a permanent solution to this audit finding.

In the interim, DOF has facilitated, through project number guidance, the recording of lifecycle expenditures. This currently provides a means to capture the costs when they are recorded throughout the FDIC. For Budget Year 2001, as a further interim step, DOF will initiate a program in conjunction with the Division of Information and Resource Management (DIRM) to collect budgets and expenses for development projects. It is anticipated that DIRM's project based version of Pillar will be utilized for 2001 budget formulation and reporting for development projects for the entire Corporation.

We thank you for the opportunity to respond and we appreciate the interest and work of the OIG in this area.

Concur:

Donald C. Demitros

Director, Division of Information Resources Management and

**Chief Information Officer** 

#### MANAGEMENT RESPONSES TO RECOMMENDATIONS

The Inspector General Act of 1978, as amended, requires the OIG to report on the status of management decisions on its recommendations in its semiannual reports to the Congress. To consider FDIC's responses as management decisions in accordance with the act and related guidance, several conditions are necessary. First, the response must describe for each recommendation

- the specific corrective actions already taken, if applicable;
- corrective actions to be taken together with the expected completion dates for their implementation; and
- documentation that will confirm completion of corrective actions.

If any recommendation identifies specific monetary benefits, FDIC management must state the amount agreed or disagreed with and the reasons for any disagreement. In the case of questioned costs, the amount FDIC plans to disallow must be included in management's response.

If management does not agree that a recommendation should be implemented, it must describe why the recommendation is not considered valid.

Second, the OIG must determine that management's descriptions of (1) the course of action already taken or proposed and (2) the documentation confirming completion of corrective actions are responsive to its recommendations.

This table presents the management responses that have been made on recommendations in our report and the status of management decisions. The information for management decisions is based on management's written response to our report and subsequent discussions with management representatives.

Rec. Number	Corrective Action: Taken or Planned / Status	Expected Completion Date	Documentation That Will Confirm Final Action	Monetary Benefits	Management Decision: Yes or No
1	Management stated that the IT Technical Committee is taking positive steps to improve the investment analysis and allow for more review by members. Ongoing discussions within the Committee and in various subcommittees are pursuing improvement of the investment analysis process. These steps include better integration of IT planning and corporate business planning, better timing of IT planning activities, and enhanced project type definitions. The revised process will be described in the instructions provided to DIRM staff at the start of the 2001 budget formulation cycle.	6/30/00	Instructions provided to DIRM staff describing revisions to the 2001 budget formulation process.	N/A	Yes

Rec. Number	Corrective Action: Taken or Planned / Status	Expected Completion Date	Documentation That Will Confirm Final Action	Monetary Benefits	Management Decision: Yes or No
2	Management agreed with the recommendation.  DIRM indicated that it had undertaken steps to implement budget reallocation in a standardized, business-focused manner. The IT Technical Committee will review requests for funding, along with opportunities to reallocate funds, during April and July each year. The reallocation decisions will focus on items on the ranked list developed as part of the prior year's planning effort, along with special requests for new or increased funding.	7/15/00	Issuance of new procedures that describe and document how the referenced process will take place.	N/A	Yes
3	Management agreed with the recommendation.  DIRM indicated it had undertaken work through the IT Technical Committee to implement the recommendation. An IT Technical Committee subcommittee has reviewed both the definitions and handling of the various project types. Their preliminary recommendations were presented on March 2, 2000 to the IT Technical Committee. Committee input is being solicited and final procedures for categorizing IT investments will be developed later in 2000, in time to support IT planning for 2001.	6/30/00	Procedures for categorizing IT investments.	N/A	Yes
4	Management agreed with the recommendation.  DIRM stated it agreed with the OIG's concern about the amount of funding devoted to "Other Development" projects in 2000 without the benefit of ranking or other meaningful IT Technical Committee evaluation. The IT Technical Committee has formed a subcommittee that will formulate recommendations for improved evaluation of "Other Development" to ensure that this category of projects is dealt with appropriately.	6/30/00	IT subcommittee recommendations for improved evaluation of "Other Development".	N/A	Yes
5	Management agreed with the recommendation.  DIRM stated that the DIRM Principal Staff met in February 2000 to draft updates to the IT goals and objectives that are key to the Plan. DIRM expected to complete the updates by March 31, 2000.  DIRM also is identifying performance indicators that provide information on DIRM's progress in achieving IT Strategic Goals and Objectives. Information about these indicators will serve as the basis to develop a performance measurement program to improve IT practices, environments	3/31/2000	Completion of updates to the FDIC's Strategic Plan's goals and objectives.  In addition, implementation of a long term plan for an	N/A	Yes
	and services; to identify risk areas; and to identify future measurable goals and objectives.		effective performance measurement program.		

Rec. Number	Corrective Action: Taken or Planned / Status	Expected Completion Date	Documentation That Will Confirm Final Action	Monetary Benefits	Management Decision: Yes or No
6	Management agreed with the recommendation.  As of March 2000, DIRM began providing the IT Technical Committee	3/31/2000	Copies of new financial status reports on IT projects.	N/A	Yes
O	monthly financial status reports for IT projects, to provide the information that the Committee needs to support the ongoing monitoring of IT projects.		reports on 11 projects.		
7	Management agreed with the recommendation.  As an interim measure, DOF stated it would initiate a program in conjunction with DIRM to collect budgets and expenses for development	12/31/2000	Written procedures implementing the project based version of Pillar for the 2001	N/A	Yes
	projects, using DIRM's project based version of Pillar for the 2001 budget formulation. In addition, DOF and the CFO proposed a plan to develop a long-term solution to address the recommendation, through a financial modernization project that is currently underway.		budget formulation.		
	Management agreed with the recommendation.	6/30/00	Recommendation to the IT Technical	N/A	Yes
8	DIRM stated it would recommend a change in the methodology to the IT Technical Committee. If approved, DIRM said it would make the necessary documentation changes and issue a memorandum to DIRM Application Systems Management and all Program Managers reinforcing this revision by June 30, 2000.		Committee to change PIR procedures, and issuance of memo to DIRM Application Systems Management and all Program Managers reinforcing the revision.		
9	Management agreed with the recommendation.  DIRM stated it would recommend this change to the Technical Committee.	3/31/00	Evidence of recommendation to the Technical	N/A	Yes
7	If approved, DIRM said it would make the necessary documentation and program changes by March 31, 2001 for the 2001 cycle of PIRs.		Committee, and documentation supporting program changes, when approved.		
10	Management agreed with the recommendation.  DIRM said it would add more comprehensive information in the final PIR	See rec. 7	PIR reports with more comprehensive analysis of cost and	N/A	Yes
	reports with regard to original and final cost and schedule information as that information becomes available.		schedule information.		