



Office of Inspector General

June 2005
Report No. 05-022

**Central Data Repository Project
Management**

AUDIT REPORT





Background and Purpose of Audit

Financial institutions regulated by the Call Report agencies are required to submit quarterly Consolidated Reports of Condition and Income, commonly referred to as Call Reports. To improve the regulatory call reporting process, the FDIC, on behalf of the Call Report agencies, entered into a \$39 million contract with Unisys Corporation for the central data repository (CDR) system. The contract consists of a phased approach for implementing the new call reporting process. Among other benefits, the CDR system (1) would provide data to the industry more quickly in a manner that allows more flexibility for data analysis and (2) would increase efficiencies, resulting in a cost savings of \$27 million over the 10-year life of the contract. The contract was modified in January 2005 to address industry feedback and allow more time for system testing and enrollment. The modification revised the system deployment date from October 2004 to September 2005.

The CDR Steering Committee was established to oversee the system development effort and includes representatives from the Federal Reserve Board, the Office of the Comptroller of the Currency, and the FDIC.

The audit objective was to determine whether CDR project management was adequate.

Central Data Repository Project Management

Results of Audit

The CDR project management has generally adopted project management practices recommended by industry standards. However, faced with the challenges of fielding new technology, accommodating highly diverse users, and adopting new business practices, CDR implementation has been delayed for at least 1 year. The lack of progress raises concerns as to whether system functionality as originally envisioned can be attained. The CDR project management team has reported the delays encountered to the Capital Investment Review Committee and has made changes in key project management positions, increased oversight, and included a penalty for non-performance in the contract with Unisys to address project progress and performance. Unisys also identified a need to improve communication between the FDIC project teams and the contractor in resolving disagreements on requirements and to provide additional resources for the project.

However, the CDR project team has not updated the risk management and contingency plans to address the risks posed by:

- pending change requests related to significant functionalities;
- requirements to be met after, rather than upon, system delivery;
- secondary options for system functionalities that, if not exercised or developed, substantially decrease the expected benefits, and
- continued delays in meeting milestones.

Recommendations and Management Response

The report recommends that the FDIC:

- Determine the cost, schedule, and benefits impact of the change requests, delayed requirements, and secondary options before the system delivery date.
- Revise the risk management plan to address post-delivery requirements.
- Update the contingency plan to reflect the revised project schedule and available options if the September 2005 delivery date is not met.

FDIC management agreed with the recommendations and has taken or planned actions to address them.

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DATE: June 15, 2005

MEMORANDUM TO: Steven O. App
Deputy to the Chairman and Chief Financial Officer

Michael E. Bartell
Chief Information Officer and
Director, Division of Information Technology

Arthur J. Murton, Director
Division of Insurance and Research

FROM: Russell A. Rau [Electronically produced version; original signed by Russell A. Rau]
Assistant Inspector General for Audits

SUBJECT: *Central Data Repository Project Management*
(Report No. 05-022)

This report presents the results of the Federal Deposit Insurance Corporation (FDIC) Office of Inspector General's (OIG) audit of the Federal Financial Institutions Examination Council's (FFIEC) project management of the Central Data Repository (CDR) system development. The objective of the audit was to determine whether CDR project management was adequate. Appendix I describes in detail our objective, scope, and methodology.

The FDIC, acting in its corporate capacity on behalf of the FFIEC Call Report agencies,¹ entered into a contract with Unisys Corporation for the design, development, testing, implementation, hosting, and maintenance of the CDR system to improve the regulatory call reporting process. The contract consists of a phased approach for implementing a new call reporting process and Uniform Bank Performance Reporting (UBPR) and banking information distribution processes. The FDIC planned to fully implement the call reporting process for financial institution use in submitting the quarterly Call Reports due by September 30, 2004. The contract was modified on January 21, 2005 to address industry feedback and allow more time for system testing and enrollment. The modification revised the system deployment date from October 2004 to September 2005.

¹ The Call Report agencies include the FDIC, the Office of the Comptroller of the Currency (OCC), and the Federal Reserve Board (FRB). Financial institutions regulated by the Call Report agencies are required to submit quarterly Consolidated Reports of Condition and Income, commonly referred to as Call Reports.

BACKGROUND

The information in the new CDR system would be relied on as the official source of Call Report information by the federal and state bank regulatory agencies, reporting banks and their service providers, and external users of Call Report data. The FDIC's Division of Insurance and Research (DIR), acting as the CDR program sponsor on behalf of the FFIEC, asked the FDIC's Board of Directors to approve up to \$44 million (including \$4.9 million for contingencies) in funding for the CDR system. The funding request was based on a cost-benefit analysis that anticipated the following benefits:

- The new process would introduce a new protocol for reporting financial information – Extensible Business Reporting Language (XBRL) – offering opportunities for reduced reporting costs and more efficient operations for both the regulatory agencies and the banking industry.
- The new process would eliminate 10 business days from the current processing timeframe and would set the stage for “real time” data.
- The new system would be both scalable and extensible to allow for new analysis and products.
- Data would be provided to the industry more quickly in formats and with tools that allow users more flexibility for data analysis.
- The new process would increase efficiencies, resulting in a cost savings of \$27 million over the 10-year life of the contract.

The Call Report agencies entered into a memorandum of understanding to share in the costs of developing and maintaining the system. The FDIC is funding 80 percent of the project. The FDIC's Board of Directors approved the funding request, and a contract was awarded to the Unisys Corporation on May 23, 2003. The contract included the following fixed-price deliverables:

Development and implementation of CDR primary requirements	\$11,473,244
Primary requirements hosting and maintenance (years 2-7)	16,630,661
Secondary requirements for system functionalities	2,080,216
Secondary requirements for hosting and maintenance (years 2-7)	74,897
3 option years for data processing services and maintenance	<u>8,761,580</u>
Total	\$39,020,598

On October 24, 2003, the FDIC issued change order no. 1 for the development and implementation of a meta-data management tool for the CDR system. The tool processes the data from the financial institutions for use in the CDR using a set of computer instructions that include dictionaries, reporting forms, taxonomies, business rules, reporting instructions, data validation criteria, system specifications, and data access rules. These instructions are referred to as meta-data. The change order increased the contract cost by \$840,000.

Project Management and Oversight

The FDIC has adopted the industry standards included in the Project Management Institute's *A Guide to the Project Management Body of Knowledge* (PMBOK® Guide) and the International

Business Machines' (IBM) Rational Unified Process (RUP®) as the methodology for system development. Both the PMBOK® Guide and RUP® emphasize the importance of project management throughout a system's development life cycle. The PMBOK® Guide describes a set of generally accepted practices for managing all types of projects, including software development projects. The guide defines project management as the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. RUP® is a software engineering process that describes who does what, when, and how for a software development and deployment project. RUP® organizes such projects with an iterative approach that addresses risk early and continuously.

The FFIEC Task Force on Reports was established to develop interagency uniformity in the reporting of periodic information that is needed for effective supervision and other public policy purposes. To this end, the Task Force began to develop a new Internet-based business model for processing the quarterly Call Reports. The Call Report agencies have taken a collaborative approach in overseeing the development, implementation, and ongoing operation of the CDR system and other supporting activities that promote the modernization of Call Report data management. Each agency provides specialized expertise and resources to facilitate the implementation of the new Call Report business process. The CDR Steering Committee, composed of senior executives from each Call Report agency, is responsible for monitoring CDR system progress; providing feedback on the performance of the CDR project and oversight managers to their respective supervisors; resolving business, operational, and policy issues related to the development and operation of the system; and reviewing and approving the CDR business continuity plan. The FDIC's Deputy Director, DIR, and the Deputy Director, Division of Information Technology (DIT), are members of the Steering Committee.

The FFIEC project management team consists of representatives from each of the Call Report agencies. The FFIEC appointed the project manager and contract oversight manager who provide day-to-day project management and have primary interactions with the CDR system contractor. The project manager reports to the CDR Steering Committee. The oversight manager is responsible for contract oversight, including the review and approval of contract deliverables. The project manager and contract oversight manager are DIR and DIT officials, respectively.

To address changes in the CDR functional requirements, the FFIEC established a Change Control Board (CCB) to implement the CDR system change control process. The CCB members include the contract oversight manager (the CCB Chairman), the CDR project manager, the CDR Steering Committee Chairman (from the FRB), a representative from the OCC, and the Unisys project manager. All project change requests must be approved by the CCB Chairman and the Unisys program manager. However, if a change request has an impact on the cost or schedule of the CDR project, the CCB, CDR Steering Committee, FFIEC Task Force on Reports, and contracting officer must approve the change request. The change control process is depicted in Appendix II.

The CDR project is also monitored by the FDIC's Capital Investment Review Committee (CIRC), which is responsible for overseeing the capital investment portfolio of the FDIC. The CIRC reviews and approves the Corporation's capital investment projects and monitors the cost,

schedule, and performance of the projects. The CIRC makes final funding recommendations to the FDIC Board of Directors and provides the Board with quarterly assessments of the capital investment portfolio. Finally, the CIRC is responsible for approving all disbursements from a project's contingency reserve.

Unisys project management responsibilities consist of program and project oversight, subcontractor management, financial oversight, and technical oversight, including subject matter experts. Unisys developed its own risk management plan and reports weekly to the FFIEC contract oversight manager and project manager. Unisys also maintains the project plan that tracks project milestones and deliverables.

Project Status

The CDR system was originally planned to be deployed by September 2004. However, on January 21, 2005, the FDIC and UNISYS executed a contract modification reflecting a new planned deployment date of September 2005. In a January 28, 2005 FDIC press release, the Call Report agencies announced a new implementation plan for the CDR. According to the press release, banks would not be required to submit Call Report data to the CDR until October 2005. The release further stated that rollout of the CDR was postponed to address industry feedback and allow more time for system testing and enrollment.

The delays in development and testing have continued to occur. Some tests, such as use case functionality testing, had been initially completed, but the defects identified during testing have not been corrected. In addition, other critical tests such as the full system testing (end-to-end testing) and security certification and accreditation have not yet been performed. Completing system development and testing within the revised milestone dates is critical to the ability to deliver the CDR project by September 30, 2005. Table 1 shows the original and revised milestones of three key tasks that need to be completed.

Table 1: CDR Project Schedule of Key Tasks

Key Milestones	Original Planned Completion Date	Revised Planned Completion Date	Delay
CDR End-to-End Test Report and Acceptance	08/06/04	07/01/05	11 months
Rollout Pilot Program	09/22/04	09/09/05	12 months
System Launch	10/01/04	10/01/05	12 months

RESULTS OF AUDIT

The CDR project management team has established adequate project management controls in accordance with practices recommended by the PMBOK® Guide and RUP.® However, the CDR project has been faced with both management and technical challenges associated with fielding new technology across multiple platforms, highly diverse users, and adopting new business practices associated with the call reporting process. The project team has been unable to overcome the challenges, and implementation of the CDR system has been delayed for at least

1 year. This lack of progress raises concerns as to whether system functionality as originally envisioned can be attained.

The CDR project management team has reported the delays encountered to the CIRC and has taken several actions to address project progress and performance. For example, the team has made changes in key project management positions, increased oversight and reporting requirements, and modified the contract with Unisys to include a penalty for non-performance. In addition, Unisys has performed an internal review of the project to evaluate progress and performance. The internal review identified a need for improved communication between the project team and Unisys to resolve disagreements about system requirements and additional Unisys resources for the project.

However, the CDR project team has not updated the risk management and contingency plans to address the risks posed by:

- pending change requests related to significant system functions;
- system requirements that will be met after, rather than upon, system delivery;
- secondary options for system functionalities that, if not exercised, substantially decrease the system’s expected benefits and effectiveness; and
- continued delays in meeting milestones.

Table 2 identifies the potential impact of the risk areas on the success of the CDR project. We adapted the CDR project team’s methodology to determine the risk levels. See Appendix V for a more detailed description of this methodology.

Table 2: Risk Areas That Could Affect the CDR Project

Risk Area	Description	Impact ^a			Risk Level
		C	S	B	
Change Requests	• Update the project management plan to reflect current contract requirements.	X	X	X	High
	• Enhance the meta-data management capability to import external edits.	X		X	
	• Provide ad hoc query capability.	X		X	
	• Provide the FDIC access to business rules.		X	X	
	• Implement meta-data versioning.	X		X	
	• Correct data edit design.	X		X	
Delayed System Functionalities	• Current design functionalities delayed until after CDR system delivery date.			X	Moderate
Secondary Options Not Exercised	• Online Analytical Processing (OLAP) tool, ^b UBPR, Call Report Facsimiles, and E-Commerce Facility.			X	High
Schedule Slippages	• Schedule slippages in the September 30, 2005 delivery date schedule.	X	X	X	High

^a C-Cost, S-Schedule, B-Benefits.

^b The OLAP tool option was exercised at the time the contract was awarded, but development work has not been completed. These options are discussed in detail on page 9 of this report.

Without adequate risk management and contingency planning, the CDR project costs could exceed the current budget, additional system development delays may occur, and anticipated benefits may not be realized.

RISK MANAGEMENT AND CONTINGENCY PLANNING

The pending change requests, delayed system functionalities, unexercised secondary options, and continued schedule slippages could significantly impact the cost, schedule, and benefits of the CDR project. The CDR project management team has not adequately addressed these risks in its risk management plan and contingency plan. As a result, the CDR project team may not be able to properly identify and mitigate the risks should they materialize.

Risk Management Guidance

The PMBOK® Guide encourages the use of risk management techniques to identify, analyze, and plan for new risks, track identified risks, continually reassess existing risks, monitor residual risks, and review the execution of risk responses while evaluating the effectiveness of those responses. The objectives of project risk management are to increase the probability and impact of positive events and decrease the probability and impact of adverse events on the project. The PMBOK® Guide highlights the relationship between identified risks and potential corrective actions, including contingency plans. The contingency plan is triggered when the risks identified during the risk management process are realized.

Impact of System Status on Cost, Schedule, and Benefits

The CDR project management team developed a risk management plan and a contingency plan for the purpose of addressing development risks.

- The risk management plan provides strategies for identifying, minimizing, and responding to risks. The plan identifies risk areas that are rated significant, moderate, or minimal based on the potential impact of the risk and the likelihood the risk will occur. The risk ratings are intended to be reevaluated monthly and changed as circumstances dictate. The risk management plan also includes the risk mitigation plan, which is used to address risks determined to be significant. The risk mitigation plan includes risk details, assignment of responsibilities, mitigation strategies, and contingency plans in the event the risks materialize.
- The contingency plan identifies proposed actions that could be taken at key points in the system development life cycle if the system's test results are less than satisfactory. In the early stages of system development, the proposed actions for unacceptable test results rely heavily on applying additional resources to correct defects and retest. For later development stages, other actions are considered such as partial or delayed implementation of the CDR system.

The CDR project management team has not determined the impact on cost, schedule, and benefits of (1) several key change requests, (2) the delayed implementation of some system

functionalities, and (3) unexercised secondary options for functionalities and has not updated the risk management plan and contingency plan accordingly. Although the contingency plan states that the risk management team and the CDR Steering Committee should re-assess the plan in light of ongoing project events and revise the plan as necessary, the plan has not been updated since June 2004. The contingency plan is based on a September 30, 2004 CDR system delivery date and relies heavily on adding contractor resources and extending the use of legacy systems in the event that the CDR system is not delivered on time. Recently, during the April 21, 2005 Steering Committee conference call, the possibility of extending the current contract for Call Report processing in the event the new system is not delivered on September 30, 2005 was discussed. However, the contingency plan does not consider possible steps to protect the FFIEC's interest and investment in the event that the development effort is no longer viable or the contract has to be terminated. The need for an updated contingency plan to reflect that possibility is evidenced by the continued slippage in the CDR system development milestones, several of which were illustrated earlier in this report.

Change Requests

The CCB had not evaluated or approved 23 of 32 change requests submitted through April 22, 2005. The FFIEC project manager, a member of the CCB, stated that the project team had not aggressively pursued completing certain change orders because the priority was to have an operational CDR system in place by October 1, 2005. As shown in Table 3, several of the change requests relate to system functionalities that have a high impact on the CDR and could result in a substantial cost increase in project development and maintenance over the life of the contract.

Table 3: Change Requests With a High Impact on the CDR Project

Change Request Not Yet Evaluated or Approved	Description	Impact on the CDR System
No. 6	Update of the project management plan for consistency with current contract requirements.	<i>Cost and Schedule:</i> The project management plan describes the work performed and the schedule for each task and deliverable, project team organization and responsibilities of key personnel, risk management approach, communications plan, project status reporting, contract deliverables, and related reference material. Without an updated plan, resources may not be adequately allocated to ensure that project deliverables are completed on time and within budget.

Change Request Not Yet Evaluated or Approved	Description	Impact on the CDR System
No. 10	Enhancement to provide the capability to import external edits that have been developed outside the CDR system by the FFIEC user community. (This requirement is to be developed after CDR system delivery.)	<i>Cost:</i> Without the enhancement, additional time will be required to enter external edits one at a time.
No. 13	An ad hoc query capability.	<i>Functionality, Schedule, and Cost:</i> Without the ad hoc query capability, the FFIEC members may not be able to extract and analyze data as part of their job functions.
No. 20	Functionality to provide the FDIC access to the CDR meta-data.	<i>Functionality and Schedule:</i> Without this access, the FDIC and OCC cannot maintain up-to-date corresponding databases to support internal information needs.
No. 21	Meta-data versioning to provide the FFIEC the ability to tie a specific Call Report to the report instructions in effect at a given point in time.	<i>Cost:</i> Frequent changes are made to Call Report instructions, thereby creating a continuing need for new versions of the meta-data. The cost of additional meta-data versioning changes could be substantial over the contract's 7-year system maintenance period. This change request is based on contract modification no. 9, which includes revisions to address meta-data versioning for sets of data series in two phases. Versioning for both Phase 1 (pre-implementation) and Phase 2 (post-implementation) will be completed without cost according to modification 9. Although, this change request was approved on April 21, 2005, the cost of meta-data versions for additional data series was not addressed. The CDR project team does anticipate there will be a future need for more meta-data versions.
No. 22	Design flaw correction that is scheduled after the CDR system delivery date.	<i>Functionality, Schedule, and Cost:</i> If the design flaw is not corrected, a substantial amount of time would be required to process Call Reports.

The impact of these change requests should be determined prior to system implementation so that the CDR project team can mitigate the risk of implementing a CDR system that does not have the functionalities originally envisioned and is not cost-beneficial.

Delayed Functionalities

As part of the January 21, 2005 contract modification, the FFIEC agreed to accept the delivery of the CDR system with some functionality that would be delayed until after September 30, 2005 (see Appendix III for a description of these functionalities). For example, for the Micro Data Reference Manual (MDRM)² will be implemented in two phases. During Phase I, the first version of MDRM will be provided by September 30, 2005. An update to MDRM will be provided in Phase II after the system delivery date. Another delayed functionality is system extensibility – adding new capabilities. The requirements documentation for extensibility will be completed by the project delivery date, and the actual work to develop this functionality will occur after the delivery date. The delayed functionalities should not impact the contract cost or current delivery schedule. However, if the functionalities are not implemented in a timely manner, they could impact the anticipated benefits of improved efficiencies and extensibility over the 7-year maintenance period of the contract.

Secondary Options for System Functionalities

Secondary options for system functionalities were provided for in the CDR system contract and can be unilaterally exercised by the FFIEC within 6 months after delivery of the CDR system. The options consist of system functionalities that are not directly related to processing Call Reports but are critical to realizing the anticipated monetary benefits and functionality of the CDR. The secondary options include the following functionalities:

- OLAP – Enables the Call Report analysts and CDR managers to generate their own reports through queries of the CDR database through a Web-browser interface.
- UBPR data – Provides financial data ratios and rankings for use by the Call Report agencies, financial institutions, and the public through a Web-site.
- Call Report facsimiles – Make available the non-confidential Call Report data through a public Web-site on a bank-by-bank basis.
- E-Commerce Facility – Allows the public to purchase Call Report data and would provide for credit card payments and user accounts. Proceeds from this facility would be transferred to the FFIEC Call Report agencies.

According to the FFIEC cost-benefit analysis used to approve the CDR funding, these functionalities provide quicker industry access to non-confidential data; allow more user flexibility for data analysis; and provide increased efficiencies. In particular, should the FFIEC not exercise the UBPR option, the estimated cost savings reflected in the cost-benefit analysis would decrease from \$27 million to only \$2.7 million. Exercising the secondary options should not impact the contract cost or the current delivery schedule because the funding for the

² MDRM is the Federal Reserve System's dictionary that contains definitions, non-financial information, and annotations regarding historical and other information. The MDRM includes, for example, a data name for each entry, a discussion of what to include and exclude in the data, and substitute instructions.

secondary options was included in the project budget approved by the FDIC's Board of Directors.

Schedule Slippages

The completion of some key functional tests has slipped since the contract was modified on January 21, 2005. In addition, as of March 22, 2005, system defects that need to be addressed before the CDR system can be delivered have not yet been resolved. The Unisys "trouble report," completed on March 22, 2005, identified 13 severe functionality defects (see Appendix IV for a description of these defects) that required the test team to stop testing the functions and 45 major defects in functions that substantially did not meet the system requirements. As a result, there is a risk that the planned implementation date of September 30, 2005 will not be met. If the CDR system is not deployed by that date, implementation will be delayed until March 31, 2006. The March 2006 implementation date is based on management's decision not to institute a new call reporting process when financial institutions are fulfilling 2005 year-end closing and reporting requirements.

The contingency plan identifies the following needed actions if implementation is delayed:

- the FFIEC Call Report agencies will need to provide additional staff resources to the CDR system development effort and maintain the current Call Report processing operations;
- the contract with Unisys may need to be modified;
- the contract with the current Call Report processing contractor will need to be extended; and
- the financial institutions and software vendors will need to be notified of the revised CDR system delivery schedule.

These actions, which are based on a 2004 system implementation schedule, may no longer be viable. In addition, the difficulties in completing system functionality tests and addressing all system requirements by the delivery date may be indicative of a need for further analysis. These challenges could require much more time or cost to overcome than anticipated, and the project may no longer be considered cost-beneficial. Accordingly, the revision of the contingency plan based on the current status should include, among other alternatives, project termination if the September 30, 2005 implementation cannot be met.

RECOMMENDATIONS

We recommend that the Director, DIR, require that the CDR project management team maintain current and complete risk management and contingency plans. Specifically:

- (1) The CDR project management team should promptly determine the cost, schedule, and benefits impact of the change requests, delayed implementation of some functionalities,

and secondary options for functionalities. The change requests should be approved in accordance with the CDR change control process. These determinations should be made before the FFIEC accepts delivery of the CDR system.

- (2) The risk management and mitigation plan should be updated to address the CDR system post-delivery requirements and functionalities.
- (3) The contingency plan should be updated and approved by the CDR Steering Committee to reflect the revised project schedule, including the post-delivery requirements and secondary options. The plan should also address available alternatives, including project termination, if the September 30, 2005 CDR system delivery date cannot be met.

CORPORATION COMMENTS AND OIG EVALUATION

On June 9, 2005, DIR provided a written response to the draft report, which is presented in its entirety in Appendix VI of this report. DIR concurred with the recommendations and described the planned corrective actions to address them. Management's response to each recommendation is summarized below, along with our evaluation of the response.

DIR concurred with recommendation 1. DIR planned to first prioritize the change requests. The CDR project team has asked the contractor to provide schedule and cost estimates for change requests that are critical to complete before system implementation. In addition, the CDR project manager established a Test Review Board (TRB) in April 2005 to review new change requests and other issues arising from FFIEC testing of the CDR. The TRB completed an evaluation of all outstanding change requests to validate their prioritization and is scheduled to notify the contractor, by June 15, 2005, regarding which change requests will be required prior to implementation.

After the contractor addresses all the change requests necessary for system implementation, the contractor will also be directed to provide cost and schedule information for the change requests that can be addressed after CDR implementation. DIR also noted that the contract does not currently require the contractor to provide schedule and cost estimates on all outstanding change requests prior to system implementation.

DIR indicated that the FDIC intends to hold the contractor responsible for any system functionalities or change requests that are implemented after the CDR is delivered and are determined to be within the scope of the contract at no additional cost. In cases where completion of a change request is postponed until after system implementation, the Contracting Officer will likely conditionally accept the CDR but withhold a portion of the payment on the final deliverable if the change request is within the original contract scope. Any deferment of functionality past initial implementation will be formalized in a contract modification. Change requests that require FFIEC payments above the firm fixed price will be formalized in a contract modification and will be subject to the approval processes both within the FDIC and at the FFIEC. DIR also noted that the FFIEC has until March 31, 2006 to exercise any desired secondary options. Prior to exercising secondary options, the FFIEC will consider all

appropriate information, including contractor performance, changing priorities within the FFIEC, and alternative approaches for achieving the results envisioned by the secondary options.

Management's planned actions are responsive to the recommendation. The recommendation is resolved but will remain undispositioned and open until we have determined that the agreed-to corrective actions have been completed and is effective.

DIR concurred with recommendation 2. The FFIEC risk management plan identifies 23 risks to the project and issues related to the functionalities that will be implemented after September 30, 2005. To fully monitor the issues and identify any associated risks, the FFIEC Risk Manager will be briefed on the cost and schedule impacts of all change requests that are accepted. This will be an ongoing process through September 15, 2005.

Management's planned action is responsive to the recommendation. The recommendation is resolved but will remain undispositioned and open until we have determined that agreed-to corrective action has been completed and is effective.

DIR concurred with recommendation 3. The CDR project team will update the contingency plan to reflect the revised project schedule and post-implementation functionality. The plan will also address any available alternatives being considered if the risks rise to an unacceptable level. The plan will be presented to the CDR Steering Committee for review and approval at its June 16, 2005 meeting.

Management's planned action is responsive to the recommendation. The recommendation is resolved but will remain undispositioned and open until we have determined that agreed-to corrective action has been completed and is effective.

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

The objective of the audit was to determine whether CDR project management was adequate. Our objective included a review of the:

- system development life-cycle controls;
- cost, schedule, and performance management;
- procurement and contract oversight;
- test and evaluation; and
- system security, including the performance of certification and accreditation in compliance with the standards published by the National Institute of Standards and Technology.

Scope

At the completion of our field work, CDR project development had not progressed to the point at which all system controls identified in our objectives were fully developed and implemented. Specifically, test plans had not been completed, many key tests identified in the project plan had not yet been performed, key aspects of the security testing had not been completed, and the certification and accreditation process had not yet begun. Therefore, our work focused on system development controls; cost, schedule, and performance management; and procurement and contract oversight.

Methodology

We performed the following activities during our audit:

- Reviewed the overall project management approach for consistency with PMBOK® Guide and RUP® standards. This review included the: project management plan, Unisys and FFIEC risk management plans, and project plan schedule to determine if the plans were in use and effective.
- Reviewed the system development life-cycle approach to project development to determine whether the approach was consistent with development standards.
- Reviewed and evaluated the processes and controls for managing and tracking project cost, schedule, and performance to assess whether the FFIEC provided adequate oversight of the project.
- Interviewed key CDR project management staff to identify the causes of development delays and other performance issues and any action taken to address the schedule and performance issues.
- Reviewed the contract and modification documentation to determine if the contract requirements were met.
- Reviewed selected system test plans and observed testing to evaluate the overall testing approach.

- Provided feedback to the CDR project team on the penetration test plan.
- Obtained and reviewed Unisys site visit reports prepared by the FFIEC, the General Services Administration, and the Small Business Administration. The reports identified that Unisys facilities had adequate security. However, because the CDR project was not fully developed or operational, the site reviews could not address project-specific security concerns.

Internal Controls

We performed an assessment of the internal controls, including the control environment, risk assessment, control activities, information and communication, and monitoring related to the CDR project management activities for the system development. Generally, the CDR project management team established and implemented an adequate structure of management controls. However, as discussed in the audit report, the risk management and contingency plans need to be updated to reflect the risk associated with post-implementation functionalities and changes, and the risk that the CDR development becomes unacceptable.

Federal Information Security Management Act (FISMA), Title III, *Information Security*, of the E-Government Act of 2002, P. L. No. 107-347

This statute, codified at Titles 40 and 44 of the United States Code, provides a comprehensive framework for ensuring the effectiveness of information resources that support federal operations and assets. The statute also emphasizes the need to provide effective government-wide management and oversight of the related information security risks. Portions of the Act apply to the FDIC, and other portions address prudent business practices. The CDR project management team has included FISMA-related concepts in its project management activities. Specifically, the project management team has developed a security plan, assigned security responsibility, and included plans for periodic review of the security controls and system authorization prior to operations.

Reliance on Computer-based Data

We assessed the reliability of the information on project status maintained in the Microsoft Project[®] application, and the information related to problem reporting and resolution tracked in the ClearQuest[®] application to ensure that computer-processed data were valid and reliable when those data were used during audit field work. We verified selected automated data to source documentation and corroborated automated data through interviews with appropriate FDIC personnel. We determined that the data were sufficiently reliable for the purposes of this audit.

Performance Measures

Implementation of the CDR by December 31, 2004 was included in the FDIC 2004 Annual Performance Plan as an indicator and target for addressing the annual performance goal to

APPENDIX I

maintain sufficient and reliable information on insured depository institutions. As discussed in the audit report, the implementation date for the CDR has been revised until September 30, 2005.

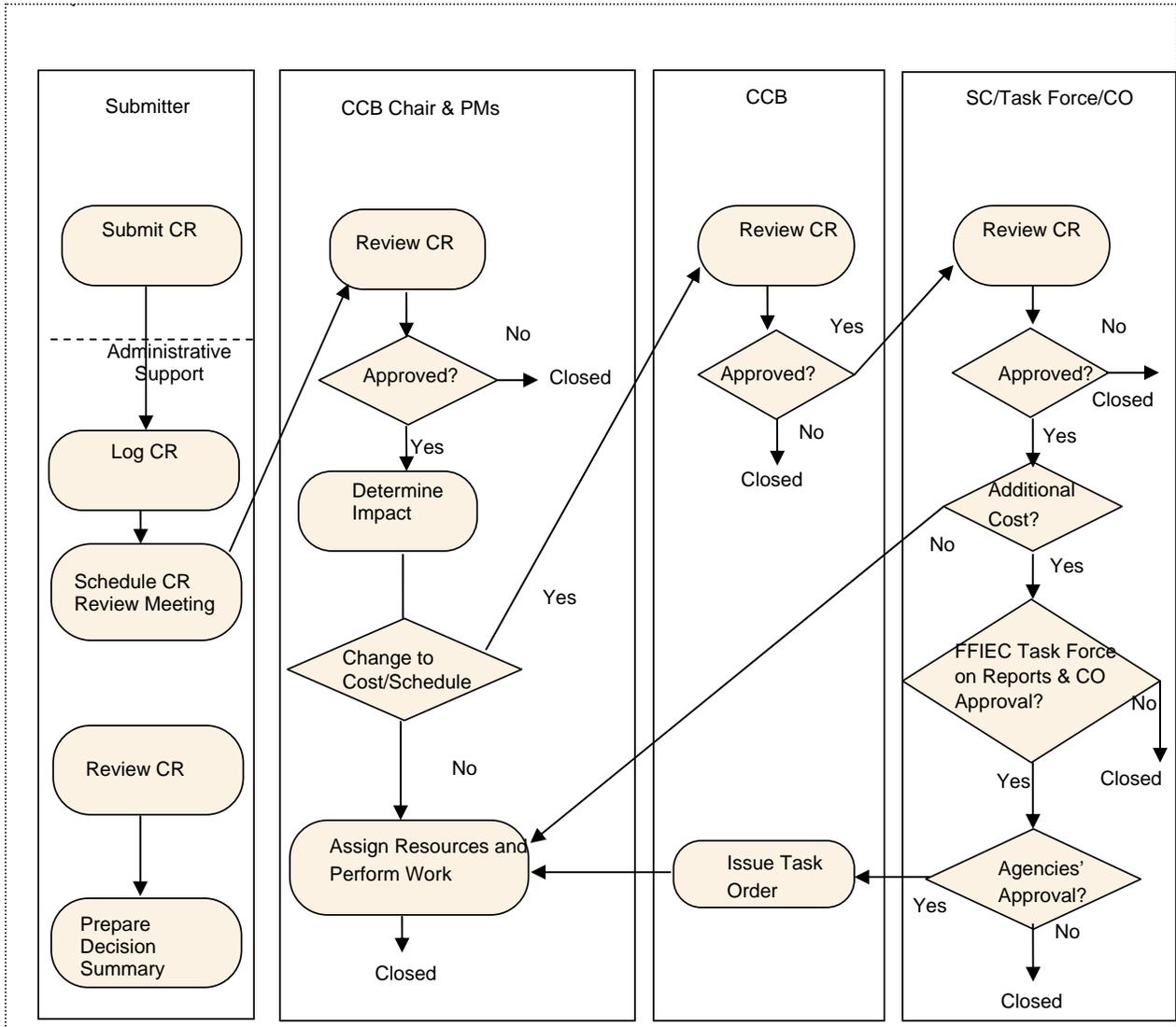
Our audit covered the period from contract award in May 2003 through April 2005. We performed our audit at the FDIC's Washington, D.C., offices from October 2004 through April 2005 in accordance with generally accepted government auditing standards.

Prior Audit Coverage

Prior to this audit, we issued the following reports related to the CDR.

- Audit Report No. 03-018 entitled, *Review of FFIEC Call Report Modernization Cost Benefit Analysis*, dated March 31, 2003. The report assessed whether the cost information included in the cost-benefit analysis was supported and the assumptions were reasonable.
- Evaluation Report No. 04-014 entitled, *XBAT Contracting and Project Management*, dated March 26, 2004. The report evaluated the contracting and development of the XBRL Business Analysis Tool (XBAT).

CDR CHANGE CONTROL PROCESS



CR – Change Request.
 CCB – Change Control Board.
 PM – Project Manager.
 SC – Steering Committee.
 CO - Contracting Officer.

DELAYED FUNCTIONALITIES AND SECONDARY OPTIONS

Delayed Functionalities

- **Enhancements to the meta-data management tool for importing edits.** In the current design, edits developed outside the CDR system must be entered one at a time. Without this enhancement, additional time will be required to enter external edits.
- **Ad hoc query capability.** Extracts and analyzes any data in the system without restrictions.
- **FDIC access to meta-data.** The FDIC and OCC require this access in order to keep corresponding databases up to date.
- **Meta-data versioning.** Provides the FFIEC the ability to tie a meta-data version to different series of meta-data.
- **Changes to data edit process.** Corrects a flaw in the current CDR design that will require a substantial amount of work to process Call Reports.
- **Extensibility.** The ability to expand system capabilities to accommodate new users and additional requirements.

Secondary Options

- **OLAP reporting.** The OLAP tool is a category of database software that provides an interface so users can transform raw data according to user-defined functions. The benefit of OLAP is the capability to aggregate large amounts of diverse data most commonly used by a group of users for fast retrieval and analysis.
- **UBPR data processing.** UBPRs are an essential output for which the Call Report data is used. Each UBPR is a multi-page report that consists of financial data organized into income and balance sheet, asset quality, capital, and other information. UBPR data is displayed by individual banks, peer groups, and percentile rankings by peer group.
- **Call Report facsimiles.** Would allow the public to obtain non-confidential Call Report facsimiles through a browser-based interface.
- **E-Commerce facility.** Would allow the public to purchase Call Report data through an E-commerce facility.

SEVERE DEFECTS IDENTIFIED IN MARCH 22, 2005 UNISYS TROUBLE REPORT

- Users unable to securely download up to six Call Reports in order to validate that the current Call Report is accurate as required.
- System is not properly evaluating formulas containing concepts that have non-negative decimal datatypes.
- Call analysts are not able to adequately retrieve and update reporting cycle status as required.
- System administrator was able to change report cycle status. This capability should not have been available to the administrator.
- System displays National Information Center (NIC) attributes at a given point in time rather than for specific reporting cycles.
- Inability to sort the report cycle list from the drop-down menu. This will make the function increasingly unusable.
- Screen space requires excessive use of the scroll bar.
- The meta-data management tool design does not support different derived concept versions for different data series or for different time periods within a data series.
- Panel of reporters (institutions required to file Call Reports) filter does not appear to allow the user to import script for a new filter for the panel of reporters for a new data series to support extensibility requirements.
- The NIC attributes need to be fully displayed.
- Incorrect order in meta-data presentation in one schedule.
- Value presentations for some items do not meet specifications.
- Reportability taxonomy extracts data from the long description field rather than the long caption field.

DETERMINATION OF RISK

The degree of risk associated with any adverse event is dependent on the likelihood that the event will occur and the probable impact of the event. Expressing these two factors in easily usable and understandable terms is essential.

The likelihood of an event occurring is the probability of the event. Precise and accurate probability estimates are nearly impossible to determine. A rating of high, medium, or low is assigned to the likelihood of occurrence based on the status and trend of the risk factor.

A designation of catastrophic, critical, marginal, or negligible is assigned in the impact rating. The impact rating is based on the impact of the risk on the stated benefits of the full system development.

Using the following table developed by the CDR project team and adapted by the OIG, we determined the overall risk for the individual risk areas.

	Likelihood of Occurrence		
Impact	High	Medium	Low
Catastrophic	High	High	Moderate
Critical	High	Moderate	Moderate
Marginal	Moderate	Moderate	Low
Negligible	Low	Low	Low

Source: CDR Project Team as Adapted by the OIG.

CORPORATION COMMENTS



Federal Deposit Insurance Corporation

Division of Insurance and Research

June 9, 2005

To: Stephen M. Beard
Deputy Assistant Inspector General for Audits
Office of the Inspector General

From: Arthur J. Murton [Electronically produced version; original signed by Arthur J. Murton]
Director, Division of Insurance and Research

Subject: Response to OIG Draft Report Entitled, *Audit of Central Data Repository Project Management* (Audit No. 2004-058)

Thank you for the opportunity to review and comment on the subject draft report. In addition to the issues we discussed at our May 12, 2005 exit conference, we are providing our response to the specific recommendations identified in the subject report.

Management's response:

The report cites three general recommendations for which we have provided a response.

The Inspector General recommends that the Director, Division of Insurance and Research (DIR), require that the CDR project management team maintain current and complete risk management and contingency plans. Specifically:

Recommendation 1: The CDR project management team should promptly determine the cost, schedule, and benefits impact of the change requests, delayed implementation of some functionalities, and secondary options for functionalities. The change requests should be approved in accordance with the CDR change control process. These determinations should be made before the FFIEC accepts delivery of the CDR system.

DIR response to recommendation #1: DIR concurs with this recommendation. The CDR project team has had a robust Change Control Board (CCB) process in place since April 2004. Through this process, the Contractor has been asked to first provide schedule and cost estimates for those Change Requests that are deemed to be critical to complete before initial CDR implementation (scheduled for September 30, 2005). In addition, the CDR Project Manager established a Test Review Board in April 2005 to review new change requests and other issues arising from FFIEC testing of the CDR. The TRB recently completed an evaluation of all outstanding change requests to validate their prioritization ranking and is scheduled to notify the Contractor which Change Requests will be required prior to implementation by June 15, 2005.

After the Contractor has addressed all issues (both defects and Change Requests) that must be completed to enable system implementation, they will be directed to provide cost and schedule information for those Change Requests that do not compromise baseline Call Report processing

and therefore can be addressed after system implementation. We believe this approach is appropriate given the nature of the project schedule and the desire to not divert resources away from meeting the current implementation date. (It should also be noted that the contract does not currently require the Contractor to provide schedule and cost estimates on all outstanding change requests prior to system implementation).

To continue to ensure that Change Requests with cost or schedule impact are addressed in formal modifications to the Contract, the updated Change Request policy incorporates specific roles for both the Contracting Officer and the Oversight Manager. The FDIC will hold the Contractor responsible for executing Change Requests that the CCB determines are within the scope of the Contract at no additional cost. In cases where completion of a Change Request is postponed until after the September 30, 2005 implementation, the Contracting Officer will likely conditionally accept the CDR and, in conjunction with that conditional acceptance, withhold a portion of the payment on the final deliverable if the Change Request is within the original contract scope. Any deferral of functionality past initial implementation will be formalized in a contract modification. Also, Change Requests that require FFIEC payments above the firm fixed price will be formalized in a contract modification and will be subject to the approval processes both within the FDIC and at the FFIEC.

In Modification Nine to the contract, both parties agreed to extend the implementation date of the CDR and the option period for exercising specified secondary functionality for one additional year. As a result, the FFIEC will have until March 31, 2006 to exercise any desired secondary options. Prior to exercising any secondary option, the FFIEC will consider all appropriate information, including performance of the Contractor, changing priorities within the FFIEC and alternative approaches for achieving the results envisioned by the secondary options that were not available at the time the original contract was executed.

Recommendation 2: The risk management plan should be updated to address the CDR system post-delivery requirements and functionalities.

DIR response to recommendation #2: DIR concurs with this recommendation. The CDR project team will continue to evaluate the impact of deferring implementation of functionality until after September 30, 2005 during the monthly risk management review. This action will be completed by September 15, 2005.

Risks are assessed on a monthly basis consistent with the FFIEC Risk Management Plan. Risk status reports are presented to the Steering Committee monthly and the risks and mitigation plans are assessed regularly at the bi-weekly project management meetings. The FFIEC Risk Management Plan identifies 23 risks to the project and issues related to functionality that will be implemented after September 30, 2005 will be reported and evaluated in one or more of those existing 23 risks. To fully monitor this issue and identify any associated risks, the FFIEC Risk Manager will be briefed on the cost and schedule impacts of all Change Requests that are accepted. This will be an on-going process through September 15, 2005.

Recommendation 3: The contingency plan should be updated and approved by the CDR Steering Committee to reflect the revised project schedule, including the post-delivery

requirements and secondary options. The plan should also address available alternatives, including project termination, if the September 30, 2005 CDR system delivery date cannot be met.

DIR response to recommendation #3: DIR concurs with this recommendation. The CDR project team will update the "Call Reporting Modernization Implementation Contingency Plan" to reflect the revised project schedule, and will identify contingency plans that address functionality to be implemented after September 30, 2005 in the "Risk Mitigation Plan" that is updated on a monthly basis. The "Call Reporting Modernization Implementation Contingency Plan" will be updated and presented to the CDR Steering Committee for review and approval at their June 16, 2005 meeting. Each of these documents will address any available alternatives being considered if risks rise to an unacceptable level in any risk category.

We appreciate your feedback on this project and the opportunity to respond to this draft report. Should you have additional questions or concerns, please feel free to contact Maureen Sweeney or Martin Henning.

cc: Steven O. App
Michael E. Bartell
James Angel

MANAGEMENT RESPONSE TO RECOMMENDATIONS

This table presents the management response on the recommendations in our report and the status of the recommendations as of the date of report issuance.

Rec. Number	Corrective Action: Taken or Planned/Status	Expected Completion Date	Monetary Benefits	Resolved: ^a Yes or No	Dispositioned: ^b Yes or No	Open or Closed ^c
1	DIR planned to first prioritize the system change requests based on the need to complete critical changes before initial system implementation. Other change requests will be processed after the critical changes are made. Secondary options will be evaluated before the March 31, 2006 date for exercising the options.	March 31, 2006	No	Yes	No	Open
2	The issues that relate to functionality implemented after September 30, 2005 will be reported in the risk management plan by September 15, 2005.	September 15, 2005	No	Yes	No	Open
3	The CDR project team will update the contingency plan and present it to the CDR Steering Committee at its June 16, 2005 meeting.	June 16, 2005	No	Yes	No	Open

^a Resolved – (1) Management concurs with the recommendation, and the planned corrective action is consistent with the recommendation.
 (2) Management does not concur with the recommendation, but planned alternative action is acceptable to the OIG.
 (3) Management agrees to the OIG monetary benefits, or a different amount, or no (\$0) amount. Monetary benefits are considered resolved as long as management provides an amount.

^b Dispositioned – The agreed-upon corrective action must be implemented, determined to be effective, and the actual amounts of monetary benefits achieved through implementation identified. The OIG is responsible for determining whether the documentation provided by management is adequate to disposition the recommendation.

^c Once the OIG disposes the recommendation, it can then be closed.