AUDIT REPORT

Real Estate Assessment Center (REAC)
Systems Development and Security

September 28, 2001

2001-DP-0004

INFORMATION SYSTEMS AUDIT DIVISION
OFFICE OF AUDIT

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MEMORANDUM FOR: Donald J. LaVoy, Director, Real Estate Assessment Center, X
Carole A. Jefferson, Deputy Assistant Secretary for Administration, A
Gloria Parker, Chief Information Officer, Q

//SIGNED//

FROM: Benjamin K. Hsiao, Director, Information Systems Audit Division, GAA

SUBJECT: Audit Report of the Real Estate Assessment Center (REAC) Systems Development and Security

We have completed an audit of HUD's system development efforts for the Real Estate Assessment Center (REAC). The objectives of our audit were to review the efficiency and effectiveness of system development and security operations. We concluded that both efficiency and effectiveness of the system development process have to be improved.

We made 21 recommendations to improve operations – 13 for the REAC Director, 5 for the Chief Procurement Officer, and 3 for the Chief Information Officer.

Within 60 days, please submit for each recommendation a status report on: (1) corrective action taken; (2) the proposed corrective action and target completion dates; or (3) why corrective action is considered unnecessary.

If you have any questions, please contact me at 708-3444 ext. 149.

Attachment

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Executive Summary

We have completed an audit of HUD's system development efforts for the Real Estate Assessment Center (REAC). The objectives of our audit were to review the efficiency and effectiveness of system development and security operations including: (1) procurement of development contractor services, (2) project management and monitoring, and (3) physical and software security controls of existing systems.

Our audit found that both efficiency and effectiveness of the system development process have to be improved. The procedures for procuring contractual services for system development do not ensure that the best value is being obtained. A potential maximum savings of $1.06 million was possible if the best value and lower cost contractor was fully utilized. REAC's project management of the system development efforts also needed improvement. As a result, some systems did not meet stakeholders' needs and additional requests for project funding were necessary. Controls over security, including physical access to the REAC offices, personnel and contractor background investigations, and software access and integrity controls need to be increased.

We found that the procurement problems were caused by HUD's over reliance on the GSA list of approved contractors and its practice of not obtaining detailed contractor prices, rate comparisons, and verifications. Project management problems were caused by late and inadequate reviews of contractor planning documents, especially the systems' functional requirements, and by inadequate use of project management software tools to monitor and question contractor progress and costs. Potential problems with physical and software security over existing REAC systems can be prevented by better enforcement of security policies and procedures.

We made 21 recommendations to improve system development operations at REAC. Thirteen of the recommendations were directed to the REAC Director, five recommendations to the Office of the Chief Procurement Officer (OCPO), and three recommendations to the Office of the Chief Information Officer (OCIO). We have classified recommendations 2B and 2H as significant recommendations for follow up in the OIG semiannual reports. Recommendation 2B advises the REAC Director to require that system development planning documents, such as feasibility studies, cost-benefit analyses, and system functional requirements, be accepted only if they are sufficiently detailed to support the remaining development phases. Recommendation 2H advises OCPO to establish fixed price contracts to the maximum extent practicable and ensure that REAC's proposed contractor scope of work documents are sufficiently specific and detailed.

We conducted separate exit conferences on the draft report with management officials from REAC, OCPO, and OCIO and have appended herein their written responses on the draft report. The REAC officials disagreed with the findings and recommendations while the OCPO and OCIO officials agreed with some of the recommendations. We have addressed the basic areas of disagreement within the body of this report's Findings sections.

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Table of Contents

Transmittal Memorandum i

Executive Summary iii

Introduction 1

FINDINGS

1. Procurement For System Development Services Needs Improvements 3

2. Project Management Needs to be Improved 11

3. Security Controls Could Be Improved 25

APPENDICES

A Analysis of Contractors Charging to SDM Development Lifecycle Phases 31

B Analysis of Impact of Product Delivery and Acceptance Dates on SDM Review of REAC's Contract Product Acceptance Forms 33

C Comparison of FY 2000 Funding Realignment for REAC Projects 35

D OCIO's Comments 37

E OCPO's Comments 39

F OIG's Evaluation of OCPO's Comments 49

G REAC's Comments 53

H OIG's Evaluation of REAC's Comment 85

I Distribution 93

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Introduction

Effective October 1, 1998, the *"Uniform Financial Reporting Standards for HUD Housing Programs"* Rule requires that public housing agencies and project owners of HUD-assisted housing submit required annual financial statements and related audit information to HUD electronically. The Rule applies to those entities with fiscal years ending December 31, 1998, and thereafter. The objective of the Rule is to standardize the annual financial information submission process and to bring consistency and fairness to the evaluation of the financial condition of housing assisted under various HUD programs. In addition, electronic submissions reduce the administrative burden of the housing authorities, project owners, mortgagees, and HUD.

To implement this new Rule, the HUD Secretary established the Real Estate Assessment Center (REAC) as part of the *"U.S. Department of Housing and Urban Development 2020 Management Reform Plan (HUD 2020)."* REAC is a separate organization apart from the traditional program functional areas. It has responsibility for assessing the performance of entities that manage or own housing in which HUD has a financial interest or statutory obligation to monitor. REAC is responsible for reviewing both the financial reports and physical inspections, and for standardizing the Department's annual assessments and methodologies for generating overall property performance scores. The objective of REAC is to protect HUD's interest by identifying and mitigating the risks of loss due to: (1) physical deterioration from neglected or inadequate maintenance; (2) financial insolvency of the owners or managers; and (3) intentional fraud, waste and abuse.

Audit Objectives

The objectives of our audit were to review the effectiveness and efficiency of system development and security operations including: (1) procurement of development contractor services, (2) project management and monitoring, and (3) physical and software security controls of existing systems. Our audit fieldwork was performed during FY 2000 and FY 2001.

Audit Scope and Methodology

We conducted our audit in accordance with Generally Accepted Government Auditing Standards (GAGAS). Accordingly, we included such tests of records and other auditing procedures that we considered necessary under the circumstances with the exception of the following scope limitation. During our audit work at the REAC location, REAC management screened most of the OIG requested information prior to delivery and accompanied our auditors during our contacts with the contractor developer staff. Some readily available documents were delivered approximately six weeks after our initial request. Since the information was being screened and the contractor meetings were being monitored, we cannot attest to integrity or completeness of that information as obtained.

In those instances where our alternate procedures were not sufficient to verify this information, we limited our audit scope and the use of this information accordingly.

We performed our on-site work at REAC's offices located at the Portals Building. We interviewed key REAC and other HUD personnel; contractor employees involved in developing REAC systems; representatives from housing industry associations; Public Housing Authority representatives; and personnel at the General Services Administration. For the audit, we reviewed applicable laws, regulations, policies, and handbooks, including HUD's System Development Methodology (SDM) manual. The SDM provides various requirements relating to system: (1) initiation, (2) definition, (3) design, (4) development, (5) evaluation, and (6) operation. In addition, OIG reviewed contract documentation; support for the configuration management process; and adherence to proper security practices. Our audit scope for system development was limited to reviewing the SDM documentation of the following REAC systems:

- Physical Assessment Subsystem (PASS)--used to gather and analyze data from physical inspections.
- Financial Assessment Subsystem--FHA (FASS-FHA)--used to assess the financial condition of multifamily housing projects.
- Financial Assessment Subsystem--Public Housing Agency (FASS-PHA)--used to assess the financial condition of Public Housing Agencies.
- Management Assessment Subsystem (MASS)--used to assess the management capabilities of Public Housing Agencies (PHAs).
- Web Access Security Subsystem (WASS), which provides a common framework for administering application-level security for HUD systems.

Procurement For System Development Services Needs Improvements

The process for selecting contractors and verifying their pricing schedules for REAC's system development projects is inadequate. Cost comparison and decision criteria documentation to support contractors selected for projects were often absent from both the official contract files at the Office of the Chief Procurement Office (OCPO) and at the contract files in the REAC office. From our estimates of actual contractor rates paid, REAC could possibly have saved $1 million in procurement costs if the lower-cost best valued contractor was used more extensively. An additional $126,000 could have been saved if the contractor labor rates were independently verified. Management has stated that detailed cost comparisons and verifications were not necessary as the contractors were selected under the General Services Administration's (GSA) schedule of contractors who had competed to be listed under the Federal Supply Schedule (FSS) for Management, Organizational and Business Improvement Services (MOBIS).

The GSA's MOBIS schedule is a streamlined procurement process for providing a group of related services and/or products to federal agencies. Although the schedule contains a list of contractors determined acceptable by GSA, federal agencies are responsible for reviewing the features and prices of the services requested and determining the best value (primarily price and qualifications) prior to placing an order. The MOBIS schedule allows agencies to establish blanket purchase agreements to obtain recurring services and quantity discounts for task orders aggregating over $2,500. Request for quotes must be sent to at least three contractors on the schedule. Requests for blanket purchase agreements and then any task orders against those agreements are submitted by REAC to the OCPO who signs those contractual documents. The OCPO generally requests an independent technical evaluation panel from HUD's Office of the Chief Information Officer (OCIO) to recommend which schedule contractor or contractors should be awarded blanket purchase agreements, based upon best value. REAC program managers overseeing the systems to be developed are responsible for making a similar determination as to best value prior to requesting a task order against one of the blanket purchase agreements.

Scope

We reviewed three major procurement actions for blanket purchase agreements under the MOBIS schedule process during 1997, 1998 and 2000. We reviewed the OCPO

procurement files, including any technical evaluation panel reports, and REAC task order files for support of best value determinations. We also compared the contractor rates charged to REAC against rates independently verified by the Defense Contract Audit Agency (DCAA) and against task order rate categories.

Lack of Price Analysis During Contractor Evaluations

Price comparison and negotiation were deemed unnecessary for GSA approved contractors

Although technical evaluations were performed on the contractors who submitted proposals for the 1997 and 1998 blanket purchase agreements, we could not find any documentation in the OCPO's official contract files to indicate that price comparisons or verifications were performed when choosing the MOBIS contractors. For example, while the independent technical evaluation panels determined the best value contractor based upon technical evaluation factors, we found no price comparisons or negotiations documentation in the contract procurement files to help determine the best value contractors. In addition, we found no documentation that independent price verifications were made, for example with DCAA. We saw negotiation memorandums for two contractors in the contract files that indicated "No negotiations were conducted for labor rates due to the fact they have been negotiated by GSA and considered competitive as well as fair and reasonable." However, price comparisons between the GSA contractors under evaluation should have been considered.

Contractor billed labor rates exceeded DCAA verified rates.

Our review of the 1997 agreement found significant average labor rate differences between two of the three contractors awarded blanket purchase agreements. Federal Acquisition Regulation 8.404(b)(5) indicates that when using FSS for commonly used services, there may be instances when ordering offices will find it advantageous to request a price reduction. For non-commonly used services, Regulation 15.404-1(c)(2)(iii)(A) and (C) provides the Government may use various cost analysis and procedures to ensure fair and reasonable price. This may include comparison of costs proposed by the offeror with actual costs previously incurred by the same offeror, or other cost estimates received in response to the Government's request. We obtained and compared the

DCAA verified contract rates (verified and available for FY 2001) for six contractors who were billing REAC project development costs for the FY 2000 period October 1, 1999 through May 25, 2000. We found that the labor rates being billed to REAC for two of the contractors exceeded the DCAA rates. Billed costs exceeded verified rates by $126,000 for the period reviewed. Although the verified rates were not available for FY 2000, the OCPO should routinely request DCAA or other verified rates for any prior or subsequent period to the award. A prior verified rate will provide a reasonableness price upon which GSA could use to negotiate upcoming contract rates while a subsequent rate can support a request for the contractors to reduce their existing billing rates.

REAC Did Not Consistently Use the Best Value Contractors Recommended by the Evaluation Panels

No objective criteria or cost comparisons to justify why REAC did not award task order to the best value contractor.

The contractors determined by the evaluation panels to be the best value were either not selected or not sufficiently utilized by REAC when issuing task orders against the blanket purchase agreements. In the 1997 agreements involving three contractors, REAC did not issue the task order to the best valued contractor. We could not find any objective criteria in REAC's files to determine how the contractor was selected or if there were any cost comparisons. According to FAR 15.308, "the source selection decision shall be documented, and the documentation shall include the rationale for any business judgments and tradeoffs made or relied on by the Source Selection Authority, including benefits associated with additional costs."

In the 1998 blanket purchase agreements, the OCPO awarded contracts to seven firms. Although the panel had determined one best value contractor, REAC used all seven firms for contractor work.

Benchmark Rate Not Determined

Selection of contractors for project work should be made after comparison with a contractor rate benchmark. In order to determine a benchmark contractor rate for the

primary type of system work being performed for REAC, we compared the average contractor labor rates for five contractors during the period October 1, 1999 through June 21, 2000. The work generally involved two or more different blanket purchase agreements or contracts for developing the system functional requirements and related business processes and providing system design input for the following projects: FASS, PASS, MASS, and WASS. For example, using the average hourly rate for the contractor, judged best value under the 1998 blanket purchase agreement, REAC could have potentially saved $1.06 million if this contractor had been used exclusively for performing the work for the four projects. The contractor also had the lowest hourly rates.

$1.06 million could have been saved had REAC used the best value contractor exclusively.

In their responses to the draft report , both REAC and the OCPO stated that the federal procurement regulations allowed or even encouraged use of multiple contractors off the GSA blanket purchase agreement. Additionally, REAC stated that the best value contractor lacked sufficient resources to perform all the contract work. We have not reported that the blanket purchase agreement procedure has been violated. However, our review found no documentation in the REAC files to explain the basis for issuing the task orders to the contractors, or whether best value was considered. The $1.06 million savings is a maximum figure only if several circumstances are met, such as the desire of the contractor to perform work on all four projects and has sufficient resources. We do note however, that the contractor is one of the largest consultants in the nation and may have the resources to perform the additional work.

An Independent Panel was not Used in the Agreements for FY 2000

Contractors with higher hourly rates were awarded task orders.

The OCPO did not convene a technical evaluation panel from the OCIO Office of Information Technology for the blanket purchase agreements awarded during March 2000. Instead, three REAC employees were used to evaluate five contractors three of which were selected for blanket purchase agreements. The three contractors selected were those having higher hourly rates as noted in our prior cost comparisons. An OCPO contracting officer cited FAR Part 8, which delineates situations where technical evaluation

panels are not necessary. However, Part 8 (Part 8.401a) states that "The Federal Supply Schedule program, directed and managed by the GSA, provides Federal agencies with a simplified process for obtaining commonly used commercial supplies and services at prices associated with volume buying." Therefore, this Part does not apply for the REAC development project procurements since these actions are specific non-common system development projects.

In its September 17 response to our draft report, REAC claimed that the task orders against this GSA schedule agreement were related to business improvement services and not related to IT systems development work; therefore, a technical panel to be convened by the OCPO to include one or more OCIO members was not necessary. Our review of the task orders clearly shows that the three schedule contractors were assisting in developing the functional requirements and business processes and in providing design input of these for the various system automation projects. For example, an objective for one order (C-OPC-21655) states that the contractor "…will also perform requirements analysis, design input, and testing in support of the development and implementation of the applicable subsystem and operating processes." We believe that the development of the requirements and design input are the key parts to any system development project.

Existing Contractor Billing Rates were not Monitored

REAC overpaid contractor by approximately $22,000

During our review, we observed a contractor manager working at the REAC government site, who, according to the contractor's labor charge details, was listed as working at the contractor's site. According to the contracted billing rates, the hourly rates for managers working at the contractor site were 11 percent higher than at the REAC site. Therefore, REAC was being billed at the higher contractor site rate. We estimate REAC incorrectly overpaid the contractor for about a year and that excessive billings totaled approximately $22,000. REAC agreed that the incorrect labor rate was applied to the manager's billed time and has taken steps to obtain reimbursement from the contractor. Details on time spent on the project are entered by the contractor staff on a jointly (HUD and contractor)

accessible software program -- Project Office. We recommend that REAC periodically compare observations of on-site contractors against the Project Office data for site assignments and applicable contract rates.

Auditee Comments

The OCPO provided a written response to our draft audit report on September 25, 2001. REAC provided a written response to our draft audit report on September 17, 2001. Both responses in their entirety are included in Appendices E and G.

Based on responses from the OCPO and REAC, we addressed their disagreements and our responses in the body of the report's findings as deemed appropriate. We also addressed the OCPO's and REAC's comments in Appendices F and H.

Recommendations

We recommend the Chief Procurement Officer:

1A. Ensure independent technical evaluation panels are used for future REAC system development projects contracts.

1B. Document and ensure that cost comparisons and analyses are part of the evaluation and selection of GSA approved contractors for future REAC contracts.

1C. Coordinate with GSA to verify and update FSS contractor prices and rates, which are applicable to HUD.

1D. Obtain justifications from REAC for any contractors requested in a task order who were not determined by the technical evaluation panel as the best value.

We recommend the Director, Real Estate Assessment Center:

1E. Assign independent REAC members for the OCPO convened technical evaluation panels for future REAC system development projects contracts.

1F. Use objective criteria and technical evaluation panel recommendations in selecting contractors to complete task orders, to include but not limited to cost comparisons among the contractors to a benchmark cost figure.

1G. Periodically compare on-site contractors' time against Project Office data and the contract's billing rate categories.

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Project Management Needs to be Improved

REAC's management of its system development projects was inadequate. The project management teams did not sufficiently review the contractors' deliverables of planning documents, including system feasibility, cost-benefit analyses, and functional requirements in accordance with HUD's System Development Methodology (SDM). In addition, the teams' use of project management software to monitor or question the contractors progress during system development was not sufficient. As a result, some projects did not meet stakeholders' needs and required substantial rework. Project costs often exceeded available funding and frequent requests were made for additional funding. REAC's project teams need to strengthen their review and analyses of the contractor compliance to the SDM requirements throughout the development lifecycle process.

Background

The HUD SDM manual provides step-by-step guidance for the different development phases or lifecycle of a system project. The SDM phases should be completed in the established order beginning with the: (1) initiate planning phase that includes the feasibility study, costs benefits analysis, and risk analysis of the project; (2) identification of functional requirements phase; (3) design phase; (4) acquisition and build phase; (5) installation and testing phase; and (6) training, system operation, and maintenance phase. HUD requires its development contractors to submit their project billing invoices with costs broken out by categories similar to the SDM phases. There are currently 10 separate cost categories numbered A through J, with A representing project planning, B representing requirements identification, C representing design, and so forth through J representing corrective/adaptive maintenance.

To oversee the contractors, HUD establishes project management teams that generally consist of two or more government employees who receive and approve (or send back for rework) the contractor deliverables, review and approve/disapprove the contractor billing invoices, and monitor the contractor progress. Both the HUD project teams and contractors have access to project management software products that assist in managing and monitoring project development. Project 98 shows target timelines for deliverables and Project Office shows the contractors' biweekly time charges, which are entered and classified by them into the 10 cost categories. In addition, the project teams have read access to the official Project Cost

Accounting System (PCAS) that provides project funding, contract or purchase amounts, and expenditures based upon processed contractor billing invoices.

Scope

We analyzed the contractors' planning, functional requirements, and other SDM contract deliverables and labor charges (for the period 10/01/99 - 06/21/00) for the PASS, FASS-FHA, and FASS-PHA development projects. We reviewed external independent reports made on some of these projects by the National Academy of Public Administration (report dated December 2000) and the General Accounting Office (GAO) July 2000 report titled -- "HUD Has Strengthened Physical Inspections but Needs to Resolve Concerns About Their Reliability." We also reviewed funding requests for REAC's ongoing development projects for FY 2000 and compared contract labor charges recorded to the Project Office monitoring system against the PCAS official accounting system. Our access to individual contractor employee timesheets, which support the charges to the Project Office system was restricted by REAC officials.

SDM Phases Are Not Done in Chronological Order

Our review of the contractor entries to Project Office found that labor costs were being charged to several cost categories concurrently for the same project and time periods. The example below shows the SDM phase for work as scheduled in Project 98 versus actually charged under Project Office for the FASS-FHA project (software version release 2.2):

SDM Phase	Work Scheduled	Dates Worked
A - Initiate Planning	12/10/99 -- 12/14/99	12/12/99 -- 2/27/00
B - Requirements Definition	12/15/99 -- 12/28/99	12/19/99 -- 1/30/00
C - System Design	12/29/99 -- 02/09/00	12/26/99 -- 3/26/00

Although the work schedule intended for the SDM phases of initial planning, requirements, and system design to be completed in chronological order, it is evident that each phase was not finished before the next phases were started. We also found that different software versions of the same project were being worked concurrently. In both instances, the failure to complete the SDM phases, especially the

planning and requirements phases, in chronological order increases the risk that insufficient information will be available to properly complete the overall project design (blueprint). For example in the latter instance, if an excessive number of the system's requirements are being identified piecemeal at different times in different versions, then the risk increases that incorrect decisions, such as the design and the selection of either the system's hardware or base software, will be made because all system requirements have not been identified and considered. Appendix A shows examples of different concurrent SDM cost categories being charged for three of the development projects. We found no evidence that the project management teams were analyzing the Project Office data and reporting on these discrepancies.

During the exit conference, REAC stated that it had been using the "evolutionary" lifecycle model for developing its systems and claimed that concurrent work on the different SDM phases were representative of this method. According to Appendix A of the SDM manual, the evolutionary method allows for piecemeal completion of the FRD for a portion of the system followed by the design and development of that portion. This cycle repeats itself for each portion or release until the entire system is developed. Although this method involves recycling through each SDM development phase more than once, it still requires that each SDM phase be done sequentially within each of those cycles. In fact, REAC's project planning documents (for two systems selected – FASS and TASS) states that the development method will consist of "phase containment," which requires that each SDM development phase be delivered and approved before the next SDM phase is completed.

Selected Hardware and Software Could Not Accommodate The Workload

Inadequate feasibility studies and requirements definitions resulted in capacity and performance problems.

The effect of inadequate feasibility studies and requirements definitions is evident in our review of the FASS-MF project and its problems resulting from hardware and base software decisions. The FASS project involved obtaining electronically filed certified financial statements from multifamily housing authorities or owners. We identified four major stages of development in the FASS

project and its predecessors where REAC noted that changes in FASS were necessary due to capacity and performance problems:

Stage 1 - The initial systems requirements document stated the database volume would be low, so a centralized database server hardware could be used. Multifamily Housing initiated the development and established the system requirements. REAC assumed responsibility for the system after the system was initiated, and ran the pilot test.

Stage 2 - The Pilot Evaluation Report identified problems with report submission methods. The report noted that the methodology had to be changed to forego online editing and to initiate offline editing at the users workstation since the number of submissions would overload processing. A later detailed systems requirements document for FASS version 1.1 states that a redesign of FASS was necessary to mitigate the risk of processing bottlenecks.

Stage 3 - A later systems requirements document for FASS version 2 states that a redesign was necessary to improve reliability, stability, and performance. A system level test plan for FASS version 2.1 stated that the software was to be recoded from LiveWire to Cold Fusion to "improve the reliability, stability, and performance of FASS - Release 2.1." An after-the-fact FHA feasibility study, dated February 2, 2000, notes that "Because of the large volume of users expected...and the concentration of projects during the first calendar quarter, the current architecture has had some difficulties supporting the business load." It notes that FASS is being converted from LiveWire to Cold Fusion. A needs statement dated February 3, 2000, stated that the existing system must be converted from LiveWire to Cold Fusion since business would not be able to perform transactions under LiveWire.

Stage 4 - On January 18, 2000, a consultant examined the REAC computing environment and issued a report that noted that problems with LiveWire were becoming evident and that the architecture was not scalable. A scalable system is one where hardware or software can adapt to increased demand. The consultant noted that adding a single larger server could increase capacity, but that it was not practical. It recommended using server farms and

clusters as a practical means of obtaining scalability, and that Cold Fusion supported web farms.

REAC had not anticipated the obvious critical issues that impacted the systems.

REAC had not anticipated the obvious critical issues that impacted the systems. As stated in an independent report, the National Academy of Public Administration's (NAPA) December 2000 report, "HUD failed to anticipate that, like income tax reporting, a large portion of the housing providers and their accountants would wait to send the required reports until the actual due dates, which are based on the providers' fiscal year ending dates. As a result, many individuals try to access HUD's system at the same time, causing the system to slow down significantly or shut down." Office of Housing's initial functional requirements document was incorrect when it concluded that a single centralized database server would be sufficient. In August 2000, the publisher of Cold Fusion provided a report to HUD that provided calculations to optimize Cold Fusion performance, and configuration recommendations. In September HUD's Systems Integrity and Quality Assurance Division, based upon REAC's recommendation, implemented the server farm solution and performance improved.

In its response to our draft report, REAC stated that the initial planning documents for this system were developed prior to REAC's establishment. After its establishment, it recognized the problems and then contracted for a study to find a solution. Our review found that REAC's recognition, or at least the action to address the problems, was not initiated until after the first system version was completed. In addition, the contracted study found that REAC needed to identify measurement methods for capacity issues prior to completing system development.

Insufficient Stakeholders' Input into the System's Requirements

Initial system developed did not accurately score property conditions.

Some problems with the system functional requirement documents were attributed to a lack of sufficient stakeholders' input for identifying requirements and business rules that affect them. REAC's development of the PASS system, which involved scoring the physical condition of multifamily housing units, lacked sufficient input of the inspection process from the industry groups

representing housing unit owners, the residents, and affected communities. As a result, the initial system that was developed did not achieve an accurate assessment scoring of the property conditions. REAC had to modify the system's scoring methodology at additional cost.

GAO and NAPA concluded that significant system problems were caused by REAC's failure to obtain the Industry Group stakeholders' concerns.

Both GAO and NAPA conducted their own reviews of the REAC systems, including the PASS scoring system. The latter organization found significant system problems, most of which were caused by REAC's failure to fully address the Industry Group stakeholders' concerns over the existing inspection processes. The GAO also noted some concerns in its report (July 2000) titled: "HUD Has Strengthened Physical Inspections but Needs to Resolve Concerns About Their Reliability." GAO indicated that a common concern to the Multifamily and Public Housing Industries is that "Some properties being reviewed that have had more than one inspection, have received significantly different scores even though the properties' condition has remained more or less the same." The report continued: "the points deducted for some items are excessive relative to the item's importance; defects found in a very small percentage of items inspected could result in a property receiving a failing score; and public housing properties and multifamily properties with comparable inspection scores are subjected to different oversight requirements by HUD."

NAPA's December 2000 report, titled "Evaluating Methods for Monitoring and Improving HUD-Assisted Housing Programs," indicates that "Modification of HUD's system needs to be done in effective consultation with HUD's customers and partners--including the industry that provides the housing, the residents who live in the housing, and the communities where the housing is located." NAPA recommends that HUD "transform the governance of the quality-assurance system into a highly consultative process in partnership with the housing industry and residents."

The NAPA report also indicates that "HUD cites many meetings, but those meetings do not appear to have produced effective consultation. This omission in HUD's system design has caused much of the controversy between HUD and its PHA partners. It also has resulted in months of friction between HUD and key elements of the public housing industry." The Director of REAC indicated that

although the budget for stakeholder meetings to obtain input for the requirements identification and system design process was limited, an adequate number of meetings (26 in total) were conducted. During the exit conference, REAC officials believed that NAPA was biased as it supported the position of the public housing agencies, which were not fond of the inspection process requirement. However, our feedback from discussions with various housing agency and industry officials on six different occasions supported the NAPA conclusions. Although conducting additional meetings will add to the system development costs, REAC should compare these costs to the additional benefits to be derived.

Cost Benefit Analyses Were Inadequate

REAC cost benefit analysis either excluded projected estimates for tangible benefits, or lacked support for the estimates.

We found that REAC's past cost-benefit analyses were deficient. Two REAC-wide cost benefit analyses for 1998 and 1999 included estimated REAC system development costs but excluded any projected estimates for the systems' tangible benefits. When projected benefits were provided, they lacked support. For example, the following two cost-benefit analyses completed during FY 2000 for the PASS and FASS-FHA projects did not explain how the project returns/benefits on investment were determined:

System	Projected Return on Investment
PASS	Savings of two percent of the estimated $6.1 billion outlay in operating subsidies to PHAs, totaling approximately $122 million.
FASS-FHA	Two percent reduction in Liability for Loan Guarantees, Estimated Future Loan Default for multi-family housing.

REAC indicated that cost benefit analyses updates are now prepared on a yearly basis for each separate subsystem. Although the yearly cost-benefit analyses might identify those situations where the future costs of further system development may outweigh the total system's benefits, the REAC project teams must ensure that the initial cost-benefit analyses are adequate to avoid sinking costs into projects that are later found not to be worth the cost.

In its response to our draft report, REAC stated that in regards to those analyses where benefits were not computed, that its Departmental guidance and OMB Circular A-94 implies that benefit computations are not worthwhile when such is difficult to project. However, we determined that the OMB circular and HUD's SDM manual recommend that the benefits as well as the costs need to be projected and analyzed even though the projections will, by their nature, be subject to uncertainty. For example, the OMB circular states that "Estimates of benefits and costs are typically uncertain because of imprecision in both underlying data and modeling assumptions." However, the circular goes on to provide guidance on estimating and disclosing how these projections were derived.

Project Teams Reviews of SDM Deliverables were Late

Deliverable acceptance delays ranged from one to six months.

Besides ensuring that the contract deliverables, such as cost-benefits analyses and system requirements documents are adequate, the REAC project teams must ensure that their reviews of these documents are timely so that any changes can be made before the other development stages are started. Our review of the Contract Product Acceptance Forms found that the team reviews were not timely. Appendix B shows the numerous time delays in signing the acceptance forms. We found 33 instances where the acceptance forms of the deliverables were signed late by either the REAC Program Manager, the REAC Government Technical Monitor (GTM), and/or the OCIO Government Technical Representative (GTR). Acceptance delays ranged from one to six months. For example, a deliverable for a FASS version 3.0.1 System Requirement Document was received by REAC on July 30, 1999, but the GTM and GTR did not approve the deliverable until October 25, 1999, almost three months later. The program manager signed the form but he did not indicate the date. Another problem of the form processing was that in 17 instances, one or more of the three team members did not sign the forms indicating approval. Although the program manager signed the forms in all instances, we could not find any information in the files to explain non-signatures. Management should require that acceptance forms have evidence of all signature approvals or disapprovals with comments documentation.

Project Office Data Were Not Reconciled To PCAS Data

Project Office showed a contractor's FY2000 labor cost for CASS at $1.18 while PCAS showed $63,287.

As previously discussed, analysis of the contractor-entered labor charges to Project Office frequently revealed that work was incurred concurrently on different SDM development phases. Contractor labor charges are also recorded in PCAS when contractor billing invoices are submitted. We found no evidence that the REAC project teams were verifying the reliability of the Project Office data by reconciling it with PCAS data. Although the two database figures will vary somewhat because the former is based upon contractor timesheet hours and costs (IT and non-IT) while the latter is based upon IT related invoices, we found significant differences in some of our comparisons. For example, Project Office showed $1.18 million in FY 2000 labor costs from one contractor for the CASS system project while PCAS showed only $63,287. We determined that the contractor had charged his time on a help-desk contract for supporting various REAC system projects to the CASS project under Project Office while these charges were budgeted and expensed to an additional 10 REAC system projects under the PCAS system. In addition, REAC also obtained additional funding outside the Working Capital Fund (WCF) for expenses which were included in Project Office but not in PCAS, even though both represented IT related costs. Use of the Project Office system without comparing its data to the official PCAS system, which is the primary basis for HUD-wide IT system funding decisions, can hinder REAC's project planning and funding requests.

Project Costs Exceeded Available Funding

The questions of concurrent development of the SDM project phases revealed by Project Office data, as well as some questions as to the reliability of the Project Office data itself, have resulted in project funding and accounting problems. Appendix C shows the wild swings in project funding realignment during FY 2000 requested for the REAC projects. Funding shortages during the year necessitated temporarily suspending one of REAC's largest

contractors until funding could be reprogrammed. The contracting method of "time and materials" rather than fixed-price contracting has added to the difficulty of staying within project funding limits.

The excerpt below is from Appendix C shows that some of the funding realignments were substantial. It also shows that the last realignment for FY 2000 was not approved until October 6, 2000, six days after the fiscal year ended. The request for this realignment was initially made on August 7, 2000, to the Deputy Secretary to obtain funding for paying REAC contractors for the fourth quarter. However, the request was not approved because the attached schedules were too complicated. REAC had to submit a revised request on September 11, 2000, which was then approved on October 6, 2000.

Project Name (Project Number)	Initially Approved 12/29/1999	Realignment Approved 06/2000	Realignment Approved 10/6/2000
CASS (REAC-05)	$ 155,230	$ 1,523,456	$ 802,633
FASS-FHA (REAC-06)	2,897,800	1,793,142	2,064,504
FASS-PHA (REAC-07)	1,868,350	2,811,781	3,850,732

Lack of available funds during the year necessitated temporarily suspending one of REAC's largest contractors.

The funding problems caused the OCPO's office to issue a stop work order for eight days to one of REAC's main contractors in mid-April 2000. REAC indicated the temporary contractor work stoppage was due to the delay in receiving funds assessed from HUD's Public and Indian Housing (PIH) and the Office of Housing for REAC's portion of the WCF. As of early June 2000, REAC had only received approximately $19 million in actual funding dollars out of $29 million budgeted dollars from HUD's WCF. Shortly after, PIH and Housing provided an additional $5.1 million. Although the funding shortage was significant, the work stoppage might have been avoided if the REAC project team had been closely monitoring the project costs against available funding levels. An OCPO official indicated that the contractor had a contractual obligation to notify the OCPO's office when expenditures have reached 85 percent of the available funding level amount. However, the official did not recall being notified by either the contractor or the REAC Project team.

In its response to our draft report, REAC stated that it adequately monitored the project costs and funding; however, there were several mitigating circumstances that resulted in delayed funding and funding shortfalls. These circumstances included receipt of funding in small increments, late notification of its FY 2000 project budget, and new project requirements based upon rule changes. Although these circumstances complicate the project budgeting process, many of the budgeting problems were self-made. These problems included project cost overruns, such as the supplemental funding issue discussed under the "Fixed Price Contracting…" section. In other instances, as discussed under the next section, REAC had to rely on supplemental funding from non-WCF sources to continue its help-desk operations for several REAC projects. Funding requests for that contract alternated between WCF funding and non-WCF funding.

Projects Bypassed the Working Capital Fund

WCF exclusion eliminates oversight from HUD's Technology Investment Board.

Funding for the March 2000 GSA schedule task orders were obtained from non-WCF sources. WCF exclusion not only eliminates a funding source, but also eliminates oversight from HUD's Technology Investment Board. This Board, along with the OCIO, reviews and provides oversight of the WCF projects. Based upon a HUD legal opinion from the General Counsel's Office, dated June 1, 2001, the OCIO and the Senior Advisor to the CFO issued a joint Memorandum banning the practice of excluding IT projects from the WCF. Program Offices were instructed to identify those development projects being funded outside the WCF and to submit them to the Investment Board for approval of WCF funding.

In its response to our draft report, REAC claimed that the March task orders were not related to IT systems development and therefore, it was proper that they not be funded out of the WCF. As discussed in Finding 1, these contracts were related to developing the systems functional requirements, related business processes, and design input. The scopes of work of these contracts were similar to the prior GSA MOBIS schedule contracts, which were funded from the WCF. In addition, the funding for help desk operations discussed earlier under the Project Office and

PCAS reconciliation section were funded initially from the WCF and then later from non-WCF sources when the WCF budgeted funds were short. We are not making any recommendations at this time because we believe the recent June 2001 memorandum and any follow-on guidance may improve consistency in the funding sources.

Fixed Price Contracting Can Control Costs

The blanket purchase agreements issued by the OCPO for the REAC development contractors have been issued under the time and material (T&M) contracting method. Although these contract types are flexible in making changes to contract's scope of work, the total contract price is also flexible because it is based upon the number of hours charged to the contract, generally up to a ceiling amount. A fixed price contract on the other hand, has a fixed detailed scope of work and price, and is the preferred method of contracting, especially, if funding resources are limited. OCPO is moving toward using a performance and outcome based, firm fixed price contracting method. A prerequisite for successfully using the fixed price method is for REAC to prepare contractor scope of work documents that are specific and detailed. In order to achieve this specificity, the functional requirements documents have to adequately identify the major system requirements and business rules so that the development contractors can design and build the system.

CPO is moving toward using performance and outcome based, firm fixed price contracting method.

In its response to our draft report, REAC stated that it already prepares specific system requirements and contract scope of work documents and claimed that a recent GAO audit report recognized REAC as having the strongest system development requirements at HUD. Although our audit covered only T&M contracts which were prevalent during our audit period, we made recommendations (2G and 2H) which recognized the increased significance of specificity of the requirements and scope of work documents for fixed price contracting.

We did note some problems with specificity for the T&M contracts which if not corrected on a systematic basis would be more pronounced for fixed priced contracting. For example, REAC requested an additional funding of

$636,240 for a T&M contract task order (C-OPC-21244) and cited the following justification: "In drafting this statement of work (SOW), REAC and HUD had underestimated the difficulty in identifying and collecting historical data, the reliability of the data once collected, and the amount of consulting work that would be requested of [the contractor] beyond the level of effort required to produce the formal deliverables listed in the Project Work Plan." The OCPO responded to the request in an email as follows: "I believe your requested increase to the subject task order is fine since this order was a T&M order and the increase is to complete the work in the task order."

In regards to REAC's citation of the GAO report "HUD Information Systems – Immature Software Acquisition Capability Increases Project Risks," dated September 14, 2001, our review did not find any statements recognizing REAC or any other HUD offices as having the strongest systems management practices. Although the REAC's RASS project generally fared better under GAO's system management grading scores than compared to the other HUD offices' projects, GAO assigned "weakness" grades to REAC's verifying the implementation of the requirements development process.

Auditee Comments

The OCPO provided a written response to our draft audit report on September 25, 2001. REAC provided a written response to our draft audit report on September 17, 2001. Both responses in their entirety are included in Appendices E and G.

OIG Evaluation of Auditee Comments

Based on responses from the OCPO and REAC, we addressed their disagreements and our responses in the body of the report's findings as deemed appropriate. We also addressed the OCPO's and REAC's comments in Appendices F and H.

Recommendations

We recommend that the Director, Real Estate Assessment Center require that:

2A. The project management teams analyze Project Office data to identify any concurrent charges to the projects' SDM phases and to obtain contractor justifications.

2B. The initial work products for the SDM Initiate phase (feasibility studies, cost benefit analyses, risk analyses) and the functional requirements identification phase will be accepted only if they are sufficiently adequate to support the remaining SDM development phases.

2C. Tasks for the functional requirements and design phases include seeking out and incorporating end-user input.

2D. A maximum timeframe be established for project management teams' review of the contract product acceptance forms and that these documents be signed by all three team members.

2E. Project management teams periodically reconcile the Project Office data with the PCAS data.

2F. Project management teams closely monitor the project costs against available funding levels.

2G. Project management teams prepare contractor scope of work documents that are specific and detailed and based upon detailed system functional requirements (with the corresponding business rules) documents.

We recommend that the Chief Procurement Officer:

2H. Establish fixed price contracts to the maximum extent practicable and ensure that REAC's proposed contractor scope of work documents are sufficiently specific and detailed.

Security Controls Could Be Improved

Security controls need to be improved over individuals accessing systems, the offices housing the individuals' computers, and the systems' software access and integrity. Our review found that all required background investigations for personnel and contractors accessing the systems have not been identified. In addition, controls over key cards for accessing REAC offices need to be improved. Several REAC employees are using easily guessed passwords for logging onto the Local Area Network (LAN). Although no significant deficiencies were found in the LAN security, REAC was not fully utilizing its change management software program to control its software versions.

Background & Scope

We examined REAC's security controls to determine if information resources were adequately protected. Security consists of several components - the people who work at or for REAC, the applications that support them, the networks that run the applications, and the security of the facilities that house the systems and data. Our audit scope included reviewing prior year OIG Financial Statement audits and workpapers relating to personnel background investigations. For physical security, we conducted physical inspections of the fourth and eighth floors of the REAC office building. We also reviewed the inventory log of the key cards that provide access to the floors. For network security, we used a network scanning software and server audit software to identify any deficiencies. For application security, we reviewed the utilization of the change management software program that secures application source code and software version changes.

Personnel Background Investigations are Backlogged

At the time of our review, REAC did not know what types of security reports had been completed for its employees and contractors, and had discussions with HUD's Human Resources Division (responsible for procuring the security reports) regarding the process and requirements. Also, REAC was attempting to classify the criticality of its application systems (which has since been completed) to determine which require a background investigation or just a security check.

Information Security Program Appendix J of the Departmental Handbook 2400.24 REV-2 states that "As a minimum for any position with access to HUD computer systems, a National Agency Check and Inquiries (NACI) is required. Persons working with HUD who have direct access to sensitive unclassified information often require background investigation beyond the initial NACI."

During past OIG annual audits of the Department's financial statements, we found that required background investigations and NACI checks for HUD personnel and contractors are seriously backlogged on a HUD-wide basis. REAC should periodically follow-up with the Human Resources Division on the completion status of all required investigations and NACIs.

REAC Did Not Fully Comply with Physical Security Procedures

Physical inspection found non-HUD systems passwords taped to workstations.

We conducted physical inspections of the REAC offices on the fourth and eighth floors of the "Portals" building and found written passwords taped to the computer workstations of two individuals. One was a REAC employee and the other was a REAC contractor. Although the individuals said the passwords did not pertain to any current HUD system, we were concerned since we did not expect to find any passwords. Because REAC was aware that we would be conducting physical inspections, they conducted four inspections in the weeks prior to our inspections. In addition, REAC e-mailed a reminder of the computer security policies to its management staff prior to these inspections. REAC's first inspection found 28 unsecured computers; the second inspection found no unsecured computers; the third inspection found one unsecured computer; and the fourth inspection found eight unsecured computers. We recommend that REAC conduct similar periodic inspections in the future.

We also reviewed procedures for assigning key cards for access to the REAC offices and generally found the current assignments to be sufficient. We spot checked the key card inventory log of past assignments and found the following security problems:

- Key cards may have been inappropriately assigned to unauthorized personnel - at one time, a key card was assigned to a vending machine personnel.
- Not everyone who had a key card may have signed the log - we were not able to find signatures of the REAC Director and his Deputy Director in the original log given to us by REAC.
- People were allowed to obtain and sign for key cards belonging to others - a lead contractor signed and was given key cards for four of his employees.

Although REAC has since corrected the concerns noted, it should conduct periodic reviews to identify security lapses

Although REAC has since corrected the concerns noted, it should conduct periodic reviews of the inventory log to identify any security lapses.

Network Security is Satisfactory

HUD had implemented network monitoring software to improve its ability to detect an attack on the network

Our use of the network scanning software to identify network vulnerabilities did not reveal any in the three REAC servers tested. We also found that HUD had implemented network monitoring software to improve its ability to detect an attack on the network. Monitoring software is a critical part of the security infrastructure, since network scanning software cannot detect every possible network vulnerability.

Users had established easily guessed passwords

We also ran server audit software and found that the servers were generally configured properly. However, the audit software found that users had established easily guessed passwords. Easily guessed passwords are dictionary words that could be guessed through the use of a password guessing program. The server security had a compensating control as it was set to disable the users' access accounts upon a specified number of failed logon attempts. However, the use of easily guessed passwords increases the risk of unauthorized access, especially if the perpetuator has some knowledge about the user. The percentage of easily guessed passwords for each server was:

17% REA01
27% REA02
27% REA_PVCS

We provided management with information about the use of easily guessed passwords. Management then informed their staff about the importance of using secure passwords that can not be easily guessed. Because HUD has plans to upgrade its server software, it is not practical to purchase password setting utilities to eliminate this problem. In the interim, we recommend that this audit software be periodically run to identify similar password instances. During the exit conference, REAC said that the OCIO is responsible for running this software.

REAC Systems Were Not Adequately Protected from Unauthorized Modification

Most REAC application systems have been developed on LAN servers and run on Unix Internet servers. Since these applications consist of thousands of lines of code that constantly have to be modified and tested, configuration management is essential to minimize unauthorized changes and inadvertent errors. REAC has instituted strong configuration management control. Developers use a commercially available software product, PVCS, to control access to the software code and ensure changes to the code are tracked and documented.

After the code is completed and tested, it is then transferred to the OCIO staff, who then installs the application code on the production (permanent) server for actual use. At the time of our review, OCIO and REAC staff both indicated that PVCS was not used to control the release of the application software code. As a result, there was a risk that unauthorized code or incorrect release versions could have been placed into production.

After we had completed our field work, OCIO began using PVCS to control the application software release process for REAC. Although we did not have the opportunity to verify the effectiveness of PVCS implementation, we did receive and examine documentation showing that this work had been completed. The documentation indicated that the new releases of REAC software are now controlled through PVCS.

PVCS is a powerful tool for controlling software configuration and is part of HUD's standard software suites. It should be used whenever possible to control software changes and releases for LAN and Internet based applications.

A Department-Wide Internet Security System Is Under REAC's Control

Since departmental-wide security does not fall under REAC's charter, sponsorship and operation of WASS should be transferred to the OCIO.

The Web Access Security Subsystem (WASS), provides a common framework for administering application-level security for HUD's web connected systems. WASS combines the capabilities of Secure Systems and Secure Connection into a single security system by combining the user registration and sign-on applications. WASS is designed to provide internal staff and external trusted business partners secured and controlled access from the web to HUD's proprietary systems.

Although department-wide security has been consolidated at the OCIO in accordance with the guidance of the CIO Act of 1996, REAC believed it was necessary to sponsor and retain ownership over WASS to expeditiously implement many of its various internet based systems. Since departmental-wide security does not fall under REAC's charter, sponsorship and operation of WASS should be transferred to the OCIO. Subtitle G of the FY 2001 National Defense Authorization Act reaffirms that OCIO has this responsibility.

Auditee Comments

The OCPO provided a written response to our draft audit report on September 25, 2001. REAC provided a written response to our draft audit report on September 17, 2001. Both responses in their entirety are included in Appendices E and G.

The OCIO provided written response to our draft audit report on September 19, 2001, and is included in its entirety in Appendix D. The OCIO concurs with recommendation 3E to accept sponsorship and operations of WASS. The OCIO does not concur with recommendation 3F to fully utilize the PVCS configuration builder program. The OCIO stated that REAC's applications have built-in scripting called "make utilities" which provides the same

functionality as the configuration building component of PVCS.

OIG Evaluation of Auditee Comments

Based on responses from the OCIO, OCPO and REAC, we addressed their disagreements and our responses in the body of the report's findings as deemed appropriate. We also addressed the OCPO's and REAC's comments in Appendices F and H.

Recommendations

We recommend that the Director, Real Estate Assessment Center:

3A. Periodically follow up with HUD's Human Resources Division on the completion status of all applicable required investigations and NACIs.

3B. Conduct periodic physical security inspections of REAC offices.

3C. Conduct periodic reviews of the inventory log of card key assignments.

We recommend that the OCIO:

3D. As an interim measure, periodically use the audit server software to identify easily guessed passwords.

3E. Request the Deputy Secretary to transfer sponsorship and operation of WASS to the OCIO.

3F. Ensure that PVCS Version manager is used for future web-based and LAN systems.

Analysis of Contractors Charging to SDM Development Lifecycle Phases

Physical Assessment Sub-system (PASS) Week Ending Charges to SDM Lifecycle Phases

	1999 10/3	10/7	10/17	10/24	10/31	11/7	11/14	11/21	11/28	12/5	12/12	12/19	12/26	2000 1/2	1/9	1/16	1/23	1/30	2/6	2/13	2/20	2/27	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25
A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x							
B	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x							
C	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x											
D	x				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x													
E		x	x	x	x	x	x																																	
F	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
G	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
H	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x		x							
I	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x						
J	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

Financial Assessment Sub-system for Multi-Family (FASS-MF) Week Ending Charges to SDM Lifecycle Phases

	1999 10/3	10/7	10/17	10/24	10/31	11/7	11/14	11/21	11/28	12/5	12/12	12/19	12/26	2000 1/2	1/9	1/16	1/23	1/30	2/6	2/13	2/20	2/27	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25
A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x														
B	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	x			x	x	x	x	x				x	x	x	x	x	x	x	x
C	x	x	x	x	x	x	x	x	x				x						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
D																																							
E																																							
F	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
G	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
H				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x											
I		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					x			x									
J	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		

Financial Assessment Sub-system for Public Housing Agencies (FASS-PHA) Week Ending Charges to SDM Lifecycle Phases

	1999 10/3	10/7	10/17	10/24	10/31	11/7	11/14	11/21	11/28	12/5	12/12	12/19	12/26	2000 1/2	1/9	1/16	1/23	1/30	2/6	2/13	2/20	2/27	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25
A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								x												
B	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x				x	x	x	x				x	x				
C	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x									x
D																																							
E																																							
F	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x		
G	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
H										x			x		x	x	x	x			x		x	x	x	x	x		x	x	x						x		
I	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	
J		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								x	x	x	x	x	x	x

SYSTEMS DEVELOPMENT METHODOLOGY PHASES

A: Project Definition/Planning
B: Requirements Definition
C: System Design
D: Software Acquisition
E: Hardware/Infrastructure Acquisition
F: New Development/Perfective Maintenance
G: System Integration/Testing
H: Installation and Deployment
I: System Operations
J: Corrective/Adaptive Maintenance

X= INDICATES THAT THERE WERE LABOR HOURS CHARGED DURING THE WEEK

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Analysis of Impact of Product Delivery and Acceptance Dates on SDM **Appendix B**
Review of REAC's Contract Product Acceptance Forms

Sub-System	Deliverable	Date Due	Date Received	PM Signed? Date Signed	GTM Signed? Date Signed	GTR Signed? Date Signed
FASS	3.0.1 System Requirement Document	07/30/99	07/30/99	yes/ND	yes/10/25/99	yes/10/25/99
FASS	System Requirements Document	11/29/99	11/29/99	yes/11/30/99	yes/01/11/00	yes/ND
FASS-PIH	3.1 Functional Requirements Doc	04/21/99	04/21/99	yes/05/04/99	yes/09/03/99	yes/09/03/99
FASS-PHA	3.1 Data Model Quality Assessment	07/01/99	07/01/99	yes/07/15/99	yes/09/02/99	yes/09/05/99
FASS-MF	Fin'l Assess Lab Processes & Funct.	05/15/99	10/22/99	yes/ND	no/ND	yes/11/26/99
FASS-MF	Phase I Rpt Design Analytic Reports	05/15/99	10/22/99	yes/ND	no/ND	yes/11/26/99
FASS-MF	Presc Advice on Fin'l & Comp'l Flags	07/15/99	10/22/99	yes/10/26/99	yes/10/27/99	yes/11/26/99
FASS-MF	Compliance & perf status reports	10/31/99	10/22/99	yes/01/05/00	yes/01/31/00	yes/02/4/00
FASS-MF	Risk Ranking Validation Results	10/15/99	10/22/99	yes/01/05/00	yes/01/31/00	yes/02/4/00
FASS-MF	Validation of Scoring Methodology	08/20/99	10/22/99	yes/10/26/99	yes/10/27/99	yes/11/26/99
FASS-MF	Business Planning Presentation	08/20/99	10/22/99	yes/10/26/99	yes/10/27/99	yes/11/26/99
FASS-MF	Compliance & Perf Status Report	08/22/99	10/22/99	yes/10/26/99	yes/10/27/99	yes/11/26/99
FASS-MF	Field Office Training Materials	09/23/99	10/22/99	yes/ND	no/ND	yes/11/26/99
FASS-MF	Financial Reporting Revisions	01/26/00	01/26/00	yes/ND	yes/04/11/00	yes/04/11/00
FASS-MF	Standardization Results (version 4)	01/26/00	01/26/00	yes/ND	yes/04/11/00	yes/04/11/00
FASS-MF	2.0 User Guide	10/29/99	10/29/99	yes/11/02/99	yes/04/11/00	yes/04/11/00
PASS	Beta Checklist QRG	10/05/99	10/05/99	yes/03/30/00	yes/04/11/00	yes/04/11/00
PASS	2.3	02/25/00	02/24/00	yes/04/06/00	no/ND	yes/06/09/00
PASS	2.3 Public Version	03/30/00	03/30/00	yes/04/06/00	no/ND	yes/06/09/00
PASS	Checklist Initial Release	09/30/99	09/30/99	yes/04/06/00	yes/04/11/00	yes/04/11/00
PASS	Scheduler Big Bucket	12/03/99	12/03/99	yes/04/06/00	no/ND	no/ND
PASS	Training & Certification	11/30/99	11/30/99	yes/04/06/00	no/ND	no/ND
PASS	Master-4 Letters	03/15/00	02/21/00	yes/04/06/00	no/ND	no/ND
PASS	Master-Systemic Deficiencies	11/30/99	11/30/99	yes/04/06/00	no/ND	no/ND
PASS	2.2	01/15/00	01/15/00	yes/04/06/00	no/ND	no/ND
PASS	Scoring Modifications	01/17/00	01/17/00	yes/04/06/00	no/ND	no/ND
PASS	2.2a	02/14/00	02/14/00	yes/04/06/00	no/ND	no/ND
PASS	Training certification 2.3	02/23/00	02/23/00	yes/04/06/00	no/ND	no/ND
PASS	Inspection Report-Points Off	02/15/00	02/15/00	yes/04/06/00	no/ND	no/ND
PASS	Scheduler Bulk Upload/Download	03/30/00	03/30/00	yes/04/06/00	no/ND	no/ND
PASS	Inspection Reports on web USDA	04/07/00	03/30/00	yes/04/06/00	no/ND	no/ND
PASS	REACS Data Movement	11/30/99	11/30/99	yes/04/06/00	no/ND	no/ND
PASS	Office Users Guide	01/11/00	01/14/00	yes/04/13/00	yes/ND	yes/4/17/00

Legend: **PM = Program Manager (REAC)** **GTM = Government Technical Monitor (REAC)**
GTR = Government Technical Representative (OCIO) **ND = No date indicated**

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Comparison of FY 2000 Funding Realignment for REAC Projects

Project Name (Project Number)	Initially Approved 12/29/1999	Realignment Approved 06/2000	Realignment Approved 10/6/2000
CASS (REAC-05)	$ 155,230	$ 1,523,456	$ 802,633
FASS-FHA (REAC-06)	2,897,800	1,793,142	2,064,504
FASS-PHA (REAC-07)	1,868,350	2,811,781	3,850,732
HASS(REAC-15)	321,560	1,493,141	797,383
LASS (REAC-12)	1,200,000	506,149	608,847
MASS (REAC-08)	982,070	1,705,000	1,730,391
NASS (REAC-09)	1,518,520	2,675,703	2,707,830
PASS (REAC-10)	4,288,730	5,872,115	5,698,415
QASS (REAC-11)	1,277,300	866,146	994,436
RASS-FHA (REAC-02)	1,399,340	400,955	609,369
RASS-PIH (REAC-01)	1,345,640	1,741,729	2,286,849
SASS (REAC-03)	3,003,470	2,886,114	3,379,951
TASS (REAC-04)	1,274,270	2,969,232	2,254,982
VASS (REAC-14)	900,000	1,246,080	739,412
WASS (REAC-16)	1,257,350	1,342,315	1,490,091
YASS (REAC-17)		457,686	489,034
GASS (REAC-13)	690,000	640,256	424,879
PASS (REAC 19)	1,146,860	0	0
NASS (REAC 21)	1,129,720	0	0
PASS (REAC 18)	967,000	0	0
PASS (REAC 20)	1,060,000	0	0
NASS (REAC 22)	1,130,860	0	0
Totals (w/o YASS Survey)	**$ 29,814,070**	**$ 30,931,000**	**$ 30,929,738**

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OCIO's Comments

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D.C. 20410-3000

September 19, 2001

CHIEF INFORMATION OFFICER

MEMORANDUM FOR: James A. Heist, Assistant Inspector General for Audit, GAF

FROM: Gloria R. Parker, Chief Information Officer, Q

SUBJECT: OIG Draft Audit Report: Real Estate Assessment Center (REAC)

We reviewed the above-referenced draft report, particularly those portions pertinent to the Office of the Chief Information Officer (OCIO), and offer the following comments:

Recommendation 3E: Request the Deputy Secretary to transfer sponsorship and operation of WASS to the CIO.

Response:

The OCIO concurs with this recommendation. According to OMB A-130, Appendix III, OCIO's Office of Information Technology (OIT) is responsible for the authentication of the general support systems. Program Offices are responsible for approving and granting access to business applications. The transfer of sponsorship will ensure HUD is in compliance with this policy.

The OCIO will initiate a review of WASS and its corresponding business functions to determine the appropriate level of resources for an effective transfer. Resources include FTEs, space, telephone lines, service level agreements, computer capacity, accuracy of user inventory, contractor support (CENCOR), and planned technology upgrades. It is important that we carefully examine every input, process, and output of WASS to make certain that any transition of this critical enterprise operation ensures that it continues to operate and provide optimum customer service.

Recommendation 3F: Require its Systems Integrity and Quality Assurance Division to fully utilize the PVCS configuration builder program.

Response:

The OCIO non-concurs with this recommendation. REAC systems are adequately protected from inadvertent modification through the use of the configuration management tool PVCS. The Configuration Builder component of PVCS has not been implemented because REAC's applications have built-in scripting called "make utilities" for compiling purposes as a part of the development environment which provide the same functionality as the Configuration Building component of PVCS. Software manufacturers for tools such as Visual Basic provide compiling

OCIO's Comments

capabilities built into the software package. Since the functionality of the Configuration Builder is inherent in the software, it would be counterproductive to create the same capability by enabling the Configuration Builder of PVCS.

PVCS software is used to control the application release elements during the entire process from development through production. New releases are controlled, tracked and documented through PVCS. Based on the above information, please remove this recommendation from future reports.

If you have any questions regarding this memorandum, please contact Holloway Coats, Jr., on 708-0614 x6007 .

2

OCPO's Comments

U. S. Department of Housing and Urban Development
Washington, D.C. 20410-3000

SEP 25 2001

OFFICE OF THE ASSISTANT SECRETARY
FOR ADMINISTRATION

MEMORANDUM FOR: Benjamin K. Hsiao, Director, Information Systems Audit Division, GAA

FROM: Carole A. Jefferson, Deputy Assistant Secretary for Administration, AA

SUBJECT: Draft Audit Report of the Real Estate Assessment Center (REAC)

Thank you for the opportunity to respond to the above draft audit report.

Though no specific contracts or task orders were identified in the audit report, it is our understanding that seven contracts or task orders were reviewed by the OIG:

C-OPC-18462, Task Order 7, ATS, awarded December 30, 1998
C-OPC-21124, Task Order 2, Anderson Consulting, awarded February 19, 1998
C-OPC-21127, Task Order 1, KPMG, awarded May 5, 1998
C-OPC-21308, Task Order 1, EDS, awarded May 4, 1999
C-OPC-21501, Arthur Anderson, awarded September 30, 1999
C-OPC-21654, PricewaterhouseCoopers (PWC), awarded April 19, 2000
C-OPC-21655, Arthur Anderson, awarded April 19, 2000

Page 3 of the draft report states that "we reviewed three major procurement actions for blanket purchase agreements under the Management Organizational and Business Improvement Services (MOBIS) schedule process during 1997, 1998, and 2000." However, none of the above contracts or task orders were awarded during 1997, and one reviewed contract and one reviewed task order were awarded during 1999. It is recommended that the audit report clearly identify those contracts and task orders that were the subject of the audit report. Doing so would facilitate the development by this office of meaningful responses that more precisely address the issues raised in the report.

Also noted is that the audit fieldwork was performed from February 2000 through October 2000 on contracts and task orders awarded from February 1998 through April 2000. The HUD Acquisition Regulation was substantially revised on February 22, 2000, and Acquisition Instruction 99-3, Indefinite-Delivery Contracts, was issued on September 11, 2000. Therefore, the reviewed contracts and task orders may not have been conducted or documented

OCPO's Comments

in accordance with current Office of the Chief Procurement Officer (OCPO) practices. The OCPO is currently conducting acquisitions in accordance with the applicable statutory and regulatory requirements, and in accordance with most of the Office of the Inspector General recommendations contained in the draft audit report.

Specific comments on each of the draft recommendations for the OCPO are provided in an attachment to this memorandum. The memorandum also provides suggested changes to the text to clarify facts.

If you have any questions concerning this response, please contact Tere Demer, Deputy Chief Procurement Officer, at 202-708-1290, x7118.

Attachment

OCPO's Comments

COMMENTS ON DRAFT AUDIT REPORT OF THE REAL ESTATE ASSESSMENT CENTER (REAC)

General Comments

1. On page 3 is the statement, "The OCPO generally requests an independent technical evaluation panel from HUD's Office of Information Technology to recommend which schedule contractor or contractors should be awarded blanket purchase agreements, based upon best value." This statement is incorrect. The Office of the Chief Information Officer (OCIO) takes part in technical evaluation panels (TEPs) only when information technology products or services are being acquired. Even if the statement is intended to refer to acquisitions through the MOBIS schedule, this statement would be incorrect because the MOBIS schedule consists of services that help federal agencies improve their management and organizational effectiveness through the use of specialized consulting, facilitation, survey, and training services – none of which are IT related. Recommend that the phrase "from HUD's Office of Information Technology" be deleted. (Note that "Office of the Chief Information Officer" is the current title of the "Office of Information Technology.")

2. Also on page 3 is the statement, "REAC program managers overseeing the systems to be developed are responsible for making a similar determination as to best value prior to issuing a task order against one of the blanket purchase agreements." Only contracting officers may issue task orders. REAC program managers may recommend to the contracting officer that a task order be issued to a particular contractor, but they are not authorized to issue task orders. Recommend that this statement be deleted in its entirety.

3. On pages 4 and 5 is a discussion of FAR 8.404, Using Schedules, and the difference between FSS rates and DCAA audited rates.

   a. The statement in Federal Acquisition Regulation (FAR) 8.404(b)(5) that "there may be instances when ordering offices will find it advantageous to request a price reduction," was changed by Federal Acquisition Circular 97-18, effective August 7, 2000. The statement now reads, "there may be other reasons to request a price reduction." The report should be changed to reflect the revised statement.

   b. The citing of this FAR 8.404(b)(5) statement as the basis for routinely requesting Defense Contract Audit Agency (DCAA) audited labor rates and comparing them to rates in FSS contracts demonstrates some misconceptions regarding the purpose and operation of the Federal Supply Schedule (FSS) program.

OCPO's Comments

i. FSS labor rates are different from DCAA labor rates. FSS labor rates are "loaded" (i.e., include indirect expenses, general and administrative (G&A) expenses, and profit), whereas DCAA labor rates are not "loaded" (indirect and G&A expenses are typically audited separately by DCAA). Therefore, FSS labor rates should be higher than DCAA labor rates – the two rates are not comparable.

ii. FAR 8.001, Priorities For Use of Government Supply Sources, requires that federal agencies satisfy requirements for supplies and services through the FSS program (or any of the other sources listed in the order of priority) before soliciting commercial sources. Federal agencies are permitted to solicit commercial sources only if the supplies or services are not available from FSS sources or any of the other sources listed in FAR 8.001.

iii. FAR 8.401(a) states that "the Federal Supply Schedule program, directed and managed by the General Services Administration (GSA), provides Federal agencies with a simplified process for obtaining commonly used commercial supplies and services at prices associated with volume buying...Indefinite delivery contracts...are established with commercial firms to provide supplies and services at stated prices for given periods of time." GSA contracting officers solicit, negotiate, and award FSS contracts, and GSA is responsible for the administration of FSS contracts. Federal agencies are authorized by GSA to place orders against FSS contracts. Federal agencies other than GSA do not negotiate FSS prices or rates.

iv. When soliciting, negotiating, and awarding FSS contracts, GSA contracting officers follow the GSA Acquisition Regulation (GSAR). GSAR 515.408, Solicitation Provisions and Contract Clauses, includes "MAS [Multiple Award Schedule] Requests for Information Other Than Cost or Pricing Data." This requires offerors to submit their "current published commercial descriptive catalogs and/or price lists...", identifies other information the offerors must provide to support their proposed FSS prices (including discounts extended to their best customers), provides a format for that information, and provides questions that must be answered by the offerors regarding their offers. Based on this information, the GSA contracting officer negotiates what he or she determines to be fair and reasonable FSS prices and rates. This is reflected in paragraph (a) of FAR 8.404, Using Schedules: "Orders placed against a Multiple Award Schedule (MAS), using the procedures in this subpart [i.e., FAR Subpart 8.4, Federal Supply Schedules], are considered to be issued using full and open competition (see 6.102(d)(3)). Therefore, ordering offices need not seek further competition, synopsize the requirement, make a separate determination of fair and

OCPO's Comments

reasonable pricing, or consider small business programs. GSA has already determined the prices of items under schedule contracts to be fair and reasonable."

v. The FAR 8.404(b)(5) statement "there may be other reasons to request a price reduction" refers to situations such as when an FSS contractor has lowered its price for one agency without passing the reduction on to all Federal ordering activities. However, FAR 8.404(b)(5) goes on to state that "schedule contractors are not required to pass on to all schedule users a price reduction extended only to an individual agency for a specific order."

vi. The report includes the statement that "a prior verified rate will provide a reasonableness price upon which to negotiate upcoming contract rates..." On the "FSS Legal Corner" web site (http://www.fss.gsa.gov/schedules/legalCorner.cfm) is a set of "Frequently Asked Questions." One of the questions is, "Where a contractor submits a drastically higher price, can the agency ask that one contractor to look at its RFQ and revise it?" The answer is, "No. While an agency may solicit additional clarifying information from only one contractor without affording another FSS contractor the same opportunity, the agency may not engage in 'defacto discussions' with only one FSS contractor."

Furthermore, the General Accounting Office has ruled in several protest decisions that acquisitions conducted under FAR Subpart 8.4 that use the negotiation techniques in FAR Part 15, Contracting by Negotiation, will be held to the "standards applied to negotiated procurements" (see, for example, B-286931, Digital Systems Group, Inc., March 7, 2001). Obtaining and reviewing DCAA labor rates, and using them during "negotiations," would subject the acquisition to the time-consuming requirements of FAR Part 15. GAO report GAO-01-125, Contract Management: Not Following Procedures Undermines Best Pricing Under GSA's Schedule, states in footnote 1 that "it takes only 15 days to place an order under a Federal Supply Schedule contract versus 268 days to award a contract using the traditional method." Therefore, conducting negotiations would contravene the purpose of the FSS program.

All of this means that OCPO must use FSS MOBIS schedules if services satisfying REAC's requirements are available, that the prices on the MOBIS schedules are considered fair and reasonable, and that there is no basis for comparison between FSS labor rates and DCAA labor rates. Since none of the conclusions in this section of the draft audit report are valid, the entire section should be deleted.

4. Page 5 contains a quotation from FAR 15.308, Source Selection Decision. As mentioned above, FAR Part 15 procedures do not apply to FSS orders. The sole documentation requirements for FSS orders are contained in FAR 8.404(b)(7), which states, "Orders

OCPO's Comments

should be documented, at a minimum, by identifying the contractor the item was purchased from, the item purchased, and the amount paid." These simplified procedures are in keeping with the purpose of the FSS program. Nevertheless, OCPO complies with GSA's "Ordering Procedures for Services (Requiring a Statement of Work)", dated September 19, 2000, (http://www.fss.gsa.gov/schedules/ordinssv.cfm), which suggests that the ordering office "document orders by identifying the contractor from which the services were purchased, the services purchased, and the amount paid. If other than a firm-fixed price order is placed, such documentation should include the basis for the determination to use a labor-hour or time-and-materials order. For agency requirements in excess of the micro-purchase threshold, the order file should document the evaluation of Schedule contractors' quotes that formed the basis for the selection of the contractor that received the order and the rationale for any trade-offs made in making the selection." It is recommended that the FAR 15.308 quotation be removed and the paragraph be rewritten to reflect OCPO compliance with applicable requirements for file documentation.

5. On page 5, the section "REAC Did Not Always Use the Best Qualified Contractors Recommended by the Evaluation Panels" reproaches OCPO for issuing blanket purchase agreements (BPAs) to seven firms, and issuing task orders to the seven firms, instead of issuing a single BPA to the best qualified contractor. This ignores the statutory preference for multiple task or delivery order contracts contained in Section 1054 of the Federal Acquisition Streamlining Act of 1994 (Public Law 103-355), which is implemented in paragraph (c) of FAR 16.504, Indefinite-Quantity Contracts. FAR 16.504(a) states that "the contracting officer must, to the maximum extent practicable, give preference to making multiple awards of indefinite-quantity contracts under a single solicitation for the same or similar supplies or services to two or more sources." In addition, paragraph (b) of FAR 16.505,Ordering, states "the contracting officer must provide each awardee a fair opportunity to be considered for each order exceeding $2,500 issued under multiple delivery-order or multiple task-order contracts..." Furthermore, FAR 16.505(b)(1)(ii)(A) prohibits contracting officers from using "any method (such as allocation or designation of any preferred awardee) that would not result in fair consideration being given to all awardees prior to placing each order..." Also, it is unclear whether the statement "the contractor also had the lowest hourly rates" refers to FSS labor rates or DCAA labor rates. It is recommended that the entire section be revised to address OCPO's compliance with the statutory requirement in Section 1054 of Public Law 103-355.

6. Page 6 contains the section titled "An Independent Panel was not Used In the Agreements for FY2000." It contains the statement, "The CPO did not convene a technical evaluation panel from the Office of Information Technology for the blanket purchase order

OCPO's Comments

agreements awarded during March 2000." Further in the paragraph is the statement that "the REAC development project procurements…are specific non-common system development projects." There are several issues that need to be addressed.

a. The title should be changed from "Office of Information Technology" to "Office of the Chief Information Officer" (OCIO).

b. The term "blanket purchase order agreements" should be "blanket purchase agreements" (BPA) which is the correct name for these contractual instruments (see FAR 13.303).

c. Participation of the OCIO in a TEP is only necessary if IT-related supplies or services are being acquired. However, there are no IT-related supplies or services being acquired under these BPAs. For example, contract C-OPC-21654 calls for the contractor to operate an assessment laboratory and perform economic analysis; analyze policy issues; provide management and consulting support; provide support and advisory services; provide customer service support; provide financial accounting, reporting, and auditing liaison services, staffing support, and other related services. None of these are related to "system development projects," so OCIO involvement in the TEP was not required. However, all the services are appropriately acquired through the MOBIS schedule.

It is recommended that this entire section be deleted.

7. On Page 18 is the section titled "Fixed Price Contracting Can Control Costs." It mentions "REAC development contractors" and "major system requirements." As mentioned above, these Blanket Purchase Orders Agreements (BPAs) are not for systems development. This section should be revised to reflect the true nature of these BPAs.

Specific Comments to Recommendations

1A. Ensure independent technical evaluation panels are used for future REAC system development projects contracts.

Concur. TEPs are currently convened for all procurements above the $100,000 simplified acquisition threshold, and these TEPs perform their duties in accordance with the Office of Administration publication "A Guide for Technical Evaluation Panels." Furthermore, when an acquisition involves systems development, OCPO will make sure that a representative of OCIO is included on the TEP.

OCPO's Comments

1B. Document and ensure that cost comparisons and analyses are part of the evaluation and selection of GSA approved contractors for future REAC contracts.

Concur. OCPO currently complies with applicable regulations and guidance on file documentation. OCPO includes in the documentation of each contract action the cost comparisons, evaluations, and decisions that led to the selection of the winning contractor.

1C. Independently verify contractor labor rates, with DCAA for example, as part of the contractor evaluation and selection process.

Nonconcur. First of all, DCAA labor rates and FSS labor rates are not comparable – FSS labor rates include overhead expenses and profit, whereas DCAA labor rates do not.

Furthermore, GSA contracting officers negotiate FSS labor rates, and those contracting officers have determined that every rate in every FSS contract is fair and reasonable. OCPO personnel can request a reduction in rate, but they cannot demand a reduction. Any attempt to conduct such "negotiations" removes the order from under FAR Subpart 8.4 procedures and places it under the much more time-consuming FAR Part 15 procedures.

Finally, OCPO contract specialists and contracting officers currently verify all contractor proposed rates by comparing them to those in the FSS contract. This comparison is documented in the Summary of Negotiation Actions, which is maintained in the official contract file. It is standard operating procedure for OCPO personnel to ask FSS contractors to reduce their rates, and the FSS contractors often agree to do so to remain competitive. Recently, several REAC incumbents did not win new contracts because other firms proposed reduced prices and better value.

1D. Obtain justifications from REAC for any contractors requested in a task order who were not determined by the technical evaluation panel as the best qualified.

Concur in part. The purpose of an acquisition is to determine the offeror that will provide the "best value" to the government, not the offeror that is "best qualified." While in many acquisitions the two are the same, there are many other factors that may keep a "best qualified" contractor from providing the "best value." Some of these factors are the number of labor hours proposed, proposed skill mix, labor rates for the proposed skill mix, relative importance of cost or price, urgency, past performance, special skills required, etc. Current OCPO practice is to issue an FSS order to the contractor that the contracting officer determines, in accordance with the evaluation plan, will provide the best value (note that REAC or the TEP may recommend a specific contractor, but the contracting officer makes the award decision). The contracting officer clearly documents his or her decision process in the contract file.

OCPO would have no objection to this recommendation provided it is clear that there are other considerations that go into an award decision besides the contractors' qualifications.

OCPO's Comments

2H. Ensure that REAC's proposed contractor scope of work documents are sufficiently specific and detailed to establish a fixed-price contract.

Concur in part. It is standard procedure for OCPO personnel to review all statements of work and to determine whether they may be appropriate for a fixed-price type contract or order. OCPO works with the various program offices, including REAC, to tailor statements of work so they more clearly define the work to be completed. However, it is not possible to define the work with sufficient specificity to permit fixed pricing in all circumstances. OCPO Acquisition Instruction 99-3, Section IX, Special Considerations for Task Order Contracts, explains this succinctly:

> "FAR 16.501-2 permits the use 'of any appropriate cost or pricing arrangement under Part 16' in an indefinite-delivery contract. Whenever possible, task orders should be priced on a fixed-price basis. However, for certain requirements, particularly where there is uncertainty concerning the level of effort required to achieve a desired result (e.g., first phase of an evaluation or study), it will not be practical or cost effective to issue fixed-price orders. In those cases, orders will be issued on a cost type basis (e.g., cost-reimbursement, cost-plus-fixed-fee (CPFF), etc.). HUD uses cost type completion task orders for a variety of requirements which involve the use of professional and technical services (e.g., short term program evaluations, management studies, business process re-engineering efforts, etc.)."

OCPO would concur with this recommendation if the words "to the maximum extent practicable" are added to the end.

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OIG Evaluation of OCPO's Comments

Cover Page of Memorandum

Based on your comment, we have clarified in the final report the type of procurement actions we reviewed.

General Comments

1. We changed the reference from "Office of Information Technology" to "Office of the Chief Information Officer" in the final report. With respect to your comment that MOBIS is not IT related, we cannot agree. Our review of the MOBIS task orders clearly show that the three schedule contractors were assisting in developing the functional requirements and business processes and in providing design input for the various system automation projects. For example, an objective for one order (C-OPC-21655) states that the contractor "…will also perform requirements analysis, design input, and testing in support of the development and implementation of the applicable subsystem and operating processes." We believe that the development of the requirements and design input are the key parts to any system development project.

2. We have revised the statement in the final report to address OCPO's comment.

3. a. We have revised the paragraph to reflect a more recent citation.

   b. Each of the OCPO's subpoints are addressed as follows:

      i. We understand that the FSS labor rates are fully loaded and accordingly, loaded the DCAA-provided labor rates with indirect rates also provided by DCAA. However, we did not consider profit in the comparison. Usually profits range from 5% to 15%. Assuming an average of 10%, we have lowered the potential saving from $140,000 to $126,000.

      ii. We agree that FAR 8.001(a)(2) Priorities for Use of Government Supply Sources applies to commonly used supplies and services.

      iii. We agree with the OCPO that FAR 8.401(a) should be followed for commonly used supplies and services. However, there are instances where FAR 8.401(a) is not always applicable to the REAC contract activities since some services needed were not common but HUD-specific and unique. For instance, the technical analysis included in the Super-MOBIS Procurement Justification Report indicated that a contractor was chosen for the Multifamily Integrated Assessment Subsystem (NASS-MF) based on "its superior understanding of the *unique needs* of the integrated multifamily assessment project (italics added)."

OIG Evaluation of OCPO's Comments

As we have noted in our report, even for commonly used services, request for quotes must be sent to at least three contractors on the schedule in order to obtain the lowest possible cost.

iv. During our audit, we found that GSA schedule rates have not been timely reviewed. As a result, the rates may have become unreasonable. HUD, in using the GSA schedule, cannot assume that the costs are necessarily the most advantageous to the Government.

v. It would be irresponsible for the OCPO not to request contractors to discount their prices when this option is available, regardless of whether or not it is required. The OCPO should always seek the prices most advantageous to the government.

vi. OCPO misinterpreted the intent of Finding 1 of the report. We did not recommend that HUD negotiate with GSA schedule contractors on prices or rates. We fully understand that only GSA can negotiate the FSS prices or rates with the scheduled contractors. The intent of our audit is to communicate to HUD the importance of cost control on REAC's system development contracts. Cost can be controlled through (1) negotiating to reduce costs on competitive procurements; (2) selecting the most cost-effective contractor when using the GSA schedule by comparing prices and rates of different contractors for similar services or products; and (3) obtaining discounts whenever available.

While we agree with OCPO's assertion that the FSS MOBIS schedules should be used for the reasons stated, we do not agree that the schedules are applicable to REAC's systems development needs. REAC's requirements cannot be done through "common services" contracts as described in 3biii. The prices on the MOBIS contracts with REAC have been proven to be higher than necessary. Therefore, your assertions are not correct in this case. Finally, the DCAA rates are loaded and comparable to the FSS labor rates (see 3bi above). We revised Recommendation 1C in the audit report to encourage the OCPO to coordinate with GSA to verify and update FSS contractor prices and rates.

4. OCPO indicated that the reference to FAR 15.308 is not applicable to FSS orders. We agree; however, the reference to FAR 15.308 remains because it is applicable to "unique" services that do not fall under FAR 8.401(a). As discussed above, the services required for the various projects are not always commonly used services. In these instances, the requirements of FAR 15.308 are necessary.

5. Based on OCPO's comments, we have revised this section of the report. The report now points out that REAC, not OCPO, decided to use all seven firms for contracted work, even

OIG Evaluation of OCPO's Comments

though the technical panel rated one as the best qualified, which we also found had the lowest cost.

6. a. We have changed the title from "Office of Information Technology" to "Office of the Chief Information Officer (OCIO)."

   b. OIG has changed the term "blanket purchase order agreements" to "blanket purchase agreements."

   c. The task order C-OPC-21654 has the same objective as C-OPC-21655. See our response to General Comment 1 shown above.

7. OCPO's assertion that the BPA's are not for systems development work is again incorrect. OIG has addressed this issue in the preceding comment.

Specific Comments to Recommendations

1A. OCPO concurs with this recommendation.

1B. OCPO concurs with this recommendation.

1C. OCPO non-concurred with this recommendation as worded in the draft. Based on OCPO's comments, we have revised the recommendation from OCPO having the responsibility to take the corrective action. Instead, we are recommending that the OCPO coordinate with GSA to verify and update FSS contractor prices and rates. Also, as previously noted, we have considered all of the cost factors and profit in making the comparison between DCAA and the FSS schedule labor rates.

1D. OCPO concurred in part with this recommendation. We have revised the term "best qualified" to "best value" in the recommendation.

2H. OCPO concurred in part with this recommendation. Based on OCPO's comments we have revised this recommendation to include the phrase "to the maximum extent practicable."

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REAC's Comments

U.S. Department of Housing and Urban Development
1280 Maryland Avenue, SW
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SEP 17 2001

REAL ESTATE ASSESSMENT CENTER

MEMORANDUM FOR: Benjamin K. Hsiao, Director, Information Systems Audit Division, GAA

FROM: William C. Thomas, Deputy Director, Real Estate Assessment Center Information Technology, X

SUBJECT: Comments on Draft Audit Report of the Real Estate Assessment Center

We reviewed your draft audit report on the systems development efforts for the Real Estate Assessment Center and assessed the 14 recommendations assigned to the REAC plus 6 other findings for compliance with the General Accounting Office's Government Auditing Reporting Standards for Performance Audits and noted the following violations (numbers in parenthesis refer to paragraphs in these standards):

- 10 findings did not identify the reasonable, attainable and relevant criteria against which the REAC's performance was being measured. (7.19)
- 3 findings had not been communicated to the REAC in a timely manner and were only communicated in the draft audit report. (7.7 and 7.8)
- 8 recommendations do not have the potential to achieve significant improvement in operations and/or were not supported by the reported findings. (7.22)
- 9 recommendations were not addressed to the parties that have the authority to act. (7.23)
- 8 findings did not report noteworthy accomplishments of the REAC (7.43)
- 5 findings did not report the frequency of occurrence to the number of transactions tested and the relationship of the findings to the REAC's operations in order to support the significance of the finding. (7.52)
- 3 recommendations were based on a single deficiency, which is not sufficient to support a broad conclusion or a related recommendation. (7.53)
- 13 findings presented factually inaccurate information incorrectly portrayed and not supported by competent relevant evidence. (7.54 and 7.55)

REAC's Comments

supported by competent relevant evidence. (7.54 and 7.55)

- 16 findings were presented in a biased manner, exaggerating and overemphasizing deficient performance without presenting explanations of unusual difficulties or circumstances of the auditee. (7.57 and 7.58)

- 17 findings were written in a tone that generated defensiveness and opposition. (7.59)

As a result of this large number of problems with the draft audit report, your representative agreed in the exit conference, where most of these weaknesses with the report were discussed, to produce a new draft before we would be asked to formally respond. However, you called me after hearing of this agreement and stated that there would be no revised draft audit report and that the final audit report was going to be issued by September 30, 2001, regardless. Therefore we have responded in an attachment to this memorandum to every finding and recommendation in the draft audit report. Except in a few isolated cases, we do not agree with any of the findings or recommendations in the draft audit report. We suggest that you correct the many factual inaccuracies and other problems with the report noted above and provide us with a new draft report if in fact any of the findings and recommendations remains.

Attachment

cc:
Donald J. LaVoy, Director, Real Estate Assessment Center, X
Gloria R. Parker, Chief Information Officer, Q
Tere A. Demer, Deputy Chief Procurement Officer, NC

REAC's Comments

REAC Response to the OIG's Audit of REAC IT Projects

Topic 1: Scope Limitation

OIG Finding: "Since the information was being screened, we cannot attest to its integrity or completeness…and our alternate procedures may not be sufficient to confirm the reliability of the information provided by REAC." (Page 2)

REAC comments: As explained to the OIG in a memo dated June 12, 2000, the data was not screened, it was controlled in a form not unlike the way the OIG controls data requests for their audit of HUD's financial statements. We kept track of what was requested, the request date and the due date for our own management controls over the validity and reliability of the data provided. In addition, because some of the OIG requests dated back to the inception of the REAC when there was only a skeleton staff, certain REAC-originating management officials were involved in the location and review of documents to be sure they were appropriate and responsive to the OIG's requests. Government Auditing Standards do not preclude management control and review of documents prior to submission to an auditor in connection with a performance audit.

Rather than paint all the data that the REAC labored to provide the OIG with the broad brush of this unwarranted scope limitation, the OIG had several steps it could have taken to clarify any specific data about which they had a concern. Government Auditing Standards offer 3 options when the auditors are unable to obtain sufficient, competent and relevant evidence about the validity and reliability of data. The three options are: 1) seek evidence from other sources, 2) redefine audit objectives to eliminate the need to use the data, and 3) use the data but clearly indicate in the report the data's limitations and refrain from making unwarranted conclusions or recommendations. (Paragraph 6.59). Following these procedures would have removed this sweeping scope limitation while avoiding the present suggestion that this report makes recommendations from data that the authors consider unreliable.

Furthermore, there are other factors to consider with this finding. The OIG initially contacted REAC in September 1998 but the official entrance conference did not take place until a year later in September 1999. In January 2000 the REAC was notified that the audit was reassigned to a new audit team. Audit fieldwork by the second team began in February 2000 and was completed in October 2000. The Draft Audit Report was issued 10 months later in August 2001. Because of the time involved from initial contact to issuance of the Draft Audit Report, including the change in audit personnel, lack of written requests for documents and access, no specific due dates initially and duplicate (and triplicate) requests for the same documents by different parties, it was often necessary to insert management controls to ensure that all OIG data requests were satisfied.

Lastly, almost every concern of the OIG relates to timeliness of REAC's responses and not to the accuracy or completeness of the information provided. Therefore, the scope limitation appears vastly broader than even the disputed facts warrant.

Page 1 of 29

REAC's Comments

Topic 2: Timeliness of REAC Responses

OIG Statements: "Some readily available documents were delivered approximately six weeks after our initial request." (Page 1)

REAC Response*: During the audit, REAC monitored fifty-one OIG requests for information. Of the items requested, thirteen were provided to the OIG on the day of the request, four were provided within five days and eighteen were provided within thirty days. Sixteen of the items requested were not readily available. In December 1998, the REAC relocated from L'Enfant to the Portals Building. During the relocation, many of the items requested by the OIG were in storage and had to be recovered. To ensure the OIG only received accurate information, many of the items requested had to be located and these efforts required additional time for REAC to respond. *Therefore, it is objectively incorrect to characterize these documents as "readily available" and doing so creates a false and inaccurate impression.

Listed below is the REAC's response to seven OIG examples of what they claim were REAC attempts to limit their access or filter information. Each of the OIG comments is factually inaccurate, misleading or omitted legitimate explanations that we have attempted to explain below. It should be noted that the OIG examples were provided subsequent to the exit conference and were not included in the draft report. We are responding to them in case they are included in the final report.

1. **IG Comment**:

   On August 7, 2001, OIG delivered an information discussion draft of the audit report to Bill Thomas and Anil Gola. A meeting was scheduled to discuss the draft on August 8, 2001 with Bill and Anil. Bill canceled the meeting saying that REAC comments to the draft audit report will be made in writing.

   REAC Response:

   The above statement is inaccurate on several counts. The draft was only delivered to Bill Thomas, not to Anil Gola, and the reason for cancellation, as documented in Bill's August 11, 2001 email to the OIG, was not that the REAC comments would be made in writing, but rather that we would address each issue as a discussion point at the exit conference. This is a very important point because the OIG did not wait until REAC management was available on or after August 21, 2001 to have the exit conference as we had requested in that e mail but instead issued the official draft report on August 17, 2001 without ever obtaining our review comments as to the report's factual accuracy and appropriateness.

2. **IG Comment**:

REAC's Comments

REAC refused to allow OIG to meet with REAC contractors without the presence of a REAC employee.

REAC Response:

We are unaware of any regulatory or statutory requirement that preclude management from being present in meetings between contractors and the HUD Inspector General. REAC's functions require institutional knowledge that most REAC contractors do not possess. Accordingly, to ensure that only accurate information was being provided and not taken out of context, we felt it was appropriate and in the Department's best interest that a REAC employee be present.

3. **IG Comment:**

Without notice, REAC deleted OIG's access to the REAC electronic library for approximately six weeks.

REAC Response:

REAC temporarily suspended access to the REAC electronic library. This action was taken because the OIG Auditors were obtaining documentation and information that was outdated. Therefore, any conclusions that could have been drawn may not have been accurate. Accordingly, this temporary action was to ensure that only current information was being provided to the OIG auditors. REAC informed the OIG of the reason for the suspension and offered to obtain the final versions of any documents the OIG wished to review. The OIG did not agree to that proposal and REAC subsequently reinstated the OIG's access to the electronic library.

4. **IG Comment:**

On May 15, 2000, OIG observed REAC generated cost reports through May 15, 2000 but was not permitted to keep the reports because the Deputy Director had not reviewed them. The reports were delivered to OIG on June 8. However, the reports contained data up to May 25, 2000. Clearly, they were not the same reports generated on May 15.

REAC Response:

REAC's established practice is to generate cost reports at the end of each month. Therefore, any reports that are generated at other times may be intended for other purposes such as verification of rates and would not be subject to the quality assurance controls normally provided to such reports. It was normal procedure for all month end cost reports to receive a quality review by the Deputy Director of REAC. In addition, the REAC IT Director met with the OIG and explained all

REAC's Comments

the differences between the two dates of the reports as all being legitimate. The Project Office System has the capability to generate reports for any specified period. The OIG could have obtained a report for any period of time from REAC.

5. **IG Comment**:

IG's request for key cards to access the REAC offices for off-hour physical inspections was not granted until July 2000. In the mean time, REAC notified it's managers of the OIG audit and conducted it's own physical inspection prior to issuing OIG the key cards.

REAC Response:

REAC's established practice is to monitor and control key card access to all working areas. REAC's Director of Administrative Services routinely monitors key card access to the facility as evidenced by Journal Reports on file. One such report was shared with the OIG. In addition a federal security risk assessment was conducted by GSA on REAC's work areas between December 17, 1999 to April 13, 2000. This detailed assessment covered numerous aspects of the facility. The above evidence demonstrates that physical security inspections are routinely performed by REAC management and not merely in anticipation of an audit.

6. **IG Comment**:

IG's request for a list of current key cardholders on July 7, 2000 was not delivered until July 28, three weeks later.

REAC Response:

This statement is factually inaccurate and misleading. Our records show that on July 13, 2000, REAC received a request for the access card roster to be provided to the OIG by July 20, 2000. Due to circumstances beyond REAC's control (the report is prepared by a commercial entity), this information was not made available until July 28, 2000 and the OIG was made aware of this delay on or before July 24, 2000. The information requested was provided on July 28, 2000, the date it was received by REAC. Subsequent to July 28, 2000, the OIG advised REAC that they really wanted a copy of the current key cardholders rather than the access card roster. REAC responded with a complete copy of the key cardholders and then the OIG advised REAC that they wanted a copy of the current key cardholders for a specific period of time in FY 2000, which REAC also provided. Finally, on September 7, 2000, the OIG requested data regarding a list of duplicate key cardholders, which REAC provided. Therefore, in view of the above facts, we feel that rather than serving as an example of REAC limiting OIG access or filtering information, this exchange illustrates REAC's diligence in responding to the OIG's many requests.

REAC's Comments

7. **IG Comment**:

REAC provided OIG a document titled "Timesheet History by Individual" for a contractor manager. When OIG requested additional timesheets, REAC offered to provide a timesheet for one more contractor of their choice and directed OIG to IT for the rest.

REAC Response:

The statement above that REAC "...directed OIG to IT..." is misleading because in an October 23, 2000 email, the REAC's wording used was "…may I please request…" that the OIG staff work directly with HUD IT. This was after it was explained that the OIG's request for information resulted in 2000 Excel pages of Project Office data, data that was so voluminous that it have to be split into four separate files that could not be verified for accuracy. When REAC explained this to the OIG, in an email dated October 23, 2000, the OIG appeared to agree and cancelled their request for the timesheet(s).

REAC's Comments

Topic 3: Contractor Selections

OIG Finding: "REAC could have potentially saved $1.06 million if the best qualified contractor had been used exclusively. The contractor had the lowest hourly rates. It was also one of the largest consultants in the nation and had the resources to perform the additional work. We found no documentation in the REAC files to explain the basis for issuing the task orders to the contractors." (Page 5)

OIG Recommendation: "Use objective criteria and technical evaluation panel recommendations in selecting contractors to complete task orders, to include but not limited to cost comparisons among the contractors with Blanket Purchase Order Agreements." (Recommendation 1F)

REAC Response: The OIG has presented factually inaccurate and misleading information in this finding. First of all, the calculation of savings is incorrect. The OIG includes MOBIS contractors in the calculation however, MOBIS contractors could not perform the system development work. In addition, all REAC MOBIS contracts were competitively awarded. Cost comparisons were not, and should not have been the only considerations in selecting the most qualified contractors and the contractor the OIG recommended did not have sufficient staff to complete this work. When these factors are taken into account there is no savings potential as explained in the paragraphs below.

At REAC's request, OIG provided a copy of the data used for the calculation of savings. They have erroneously reported that had we used a lower priced systems development contractor to perform the higher priced non-systems development work competed under the MOBIS contract, we could have saved money. The MOBIS contracts were primarily used to obtain experts in economics, auditing, finance and accounting to support the conversion to generally accepted accounting principles and to support the development of the financial scoring models used by the REAC to assess financial condition. These were not unique services, as most all CPA firms offer them; but they do tend to be more expensive that systems development services. Systems development contractors, although less expensive, would not be qualified and in fact could not provide the financial services acquired under the MOBIS contracts.

During the period in question, we used several systems developers because of REAC's exponential growth, in contrast to what the OIG claims, no one firm had all the resources to support the REAC. There were many reasons for this. One was the nation-wide Y2K effort that was consuming all the IT development resources in the marketplace; another was the popularity of the Dot.com businesses that were attracting the IT talent pool. In fact, during the summer of 1999 there were over 300,000 high tech jobs vacant in the DC area. In order to staff the REAC work, one contractor was having job fairs in Chicago and Texas where the vacancies were much lower; another contractor was flying in out-of-town contractors and absorbing their travel and living expenses for a short period of time. In addition, using multiple contractors gave us a competitive position, allowing us to maximize the talents of each, and minimized our development risk by having only one contractor to look to for all of our development needs.

REAC's Comments

During the period of the audit there was no requirement in place for the IT organization to use technical panels for awarding task orders. The Office of Information Technology (OIT) in some cases would make the selections for us. When we would ask for services they would offer what they considered to be the most appropriate of their contractors. The REAC's first help desk was a good example of that practice. In other cases the OIT would offer us the choice of their contractors with all being presented as cost effective and qualified without the need for further evaluation and justification. We would make the selections based on our prior experience with them, their particular strengths and their availability. In other cases, we were offered the opportunity to merely issue a work request against an existing task order. In contrast, the REAC has been consistently using objective criteria and technical evaluation panels for its contracts since it awarded the first inspection contracts in 1998 continuing to the present.

Another point of factual inaccuracy and misleading information is the reference on page 5 of the draft report to an email document. The email message dated February 9, 1999 refers to a MOBIS contract not an IT contract as is implied by the OIG. The e-mail was in reference to a proposed **work plan** for "a process to verify the public housing tenant survey process", not to a **proposal** under an OPC solicitation. The contractor had already been determined to be the one to provide the best value to the Government by OPC. They were selected under guidance and in coordination with OPC. This should have been clear to the OIG simply based on the date of the e-mail, which was approximately 5 months after the contract was awarded September 29, 1998.

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Page 7 of 29

REAC's Comments

Topic 4: Independent Panels

OIG Finding: "The CPO did not convene a technical evaluation panel from the Office of Information Technology for the blanket purchase order agreement awarded during March 2000. (Page 6)

OIG Recommendation: "Include independent members in the technical evaluation panels for future REAC systems development projects contracts." (Recommendation 1E)

REAC Response: This finding is factually inaccurate. The only significant awards made by OPC to support REAC requirements in the March 2000 timeframe were the award of three Delivery Orders issued against the GSA multiple award schedule contract for "Management, Organization and Business Improvement Services (MOBIS)". No blanket purchase order agreements were issued for REAC support in this timeframe.

The MOBIS awards are not IT procurements. Therefore, the Office of Information Technology, now called the CIO, was not involved, as appropriate. However, a technical panel was convened by REAC for this MOBIS procurement. The Technical Evaluation Panel prepared a detailed and comprehensive Technical Evaluation report. This report was written in a manner that followed the technical evaluation criteria contained in the associated solicitation. The report was submitted to and accepted by OPC, and was the basis on which the awards were made.

This recommendation, if it remains in the report in its current form, should be addressed to the CPO. Government Auditing Standards requires recommendations to be addressed to parties that have the authority to act.

Page 8 of 29

REAC's Comments

Topic 5. Off-site Billing Rates

OIG Finding: "We observed a contractor manager working at the REAC government site, who, according to the contractor's labor charge details, was listed as working at the contractor's site. (Page 6)

OIG Recommendation: " Periodically compare on-site contractors' time against Project Office data and the contractor's billing rate categories." (Recommendation 1G)

REAC Response: As per the Yellow Book (Paragraph 7.53), a single example of a deficiency is not sufficient to support a broad conclusion or a related recommendation. During fiscal year 2000, the lead manager for one of our largest contractors died suddenly and an immediate replacement was obtained from off-site contractor management. Due to the emergency nature of the situation an adjustment was not made to her billing rate. This was an isolated incident and clearly an unusual circumstance. The GTR recovered $16,596 against an invoice paid in December 2000.

Over the past year, the REAC has performed two 100% percent verifications and found no other problems with on site versus off site rates. The risk of this problem recurring is very low because REAC has a written practice of requiring contractors to work on site because for IT contracts the rates are lower and because we can better monitor contractor performance. Furthermore it is not a normal practice for contractors to move from on site to offsite or visa versa. During February 2001, only 10 out of 142 REAC IT contractors worked off-site and of the 10, 5 only work part time on REAC projects. In addition, during the same period, REAC had over 60 MOBIS contractors working primarily on site for which there is no contractual rate difference for on-site and off-site work.

REAC's Comments

Topic 6: Access to documents

OIG Finding: "Our access to individual contractor timesheets, supporting the charges to the Project Office system, was restricted by REAC officials." (Page 10)

REAC Response: This is not a true statement. All REAC contractor timesheet information in the REAC possession is in electronic format, in Project Office to which the OIG had and still has access. In fact, the OIG's Appendix A appears to use this information. Furthermore on October 23, 2000, the OIG cancelled this request in writing.

Page 10 of 29

REAC's Comments

Topic 7: Lifecycle Models

OIG Finding: "…each phase was not finished before the next phases were started. We also found that different software versions of the same project were being worked on concurrently." (page 10) "We found no evidence that the project management teams were analyzing the Project Office data and reporting on these discrepancies." (page 11)

OIG Recommendation: "The project management teams analyze Project Office data to identify any concurrent charges to the projects' SDM phases and to obtain contractor justifications." (Recommendation 2A)

REAC Response: The REAC practice of developing its systems in small releases is the most appropriate choice for the REAC business circumstances, in accordance with the Department's Systems Development Methodology (SDM) and documented in the REAC project plans. Specifically, we follow the "evolutionary" model of systems development as allowed by SDM on page A-12. The report should state that REAC appropriately followed the Departmental model for work with its specific system requirements.

In addition, the Office of the Chief Information Officer, guides project managers to plan projects to implement functionality in small phases in order to assure a higher likelihood of success. Furthermore, HUD's Capital planning process scores projects higher if they plan shorter payback periods. REAC projects collect all of the requirements on the front end of a project and design and implement in small releases. Under this model it is a normal practice for contractors to concurrently work on more than one software version at a time; it is not a discrepancy.

Page 11 of 29

REAC's Comments

Topic 8: System Capacity and Performance

OIG Finding: "The effect of inadequate feasibility studies and requirements definition is evident in our review of the FASS-MF project and its problems resulting from hardware and base software decisions." (Page 11) "REAC had not anticipated the obvious critical issues that impacted the systems." (Page 12)

OIG Recommendation: None

REAC Response: The OIG's finding is inaccurate. The REAC had anticipated the surge of users that would be accessing the system and the REAC (not the HUD's systems Integrity and Quality Assurance Division) developed and implemented the final solution. On March 2, 1999, the REAC communicated to HUD IT in writing the capacity requirements for all REAC systems. On April 22, 1999, HUD IT proposed system upgrades to support the requirements. On April 26, 1999, REAC approved the cost estimate for the upgrades. Documents supporting these statements were provided to the OIG on October 24, 2000 and verbally accepted by the OIG as resolving this issue. Therefore, it is unclear why this issue remains in the report.

Page 12 of 29

REAC's Comments

Topic 9: User Involvement

OIG Findings: "REAC's development of the PASS system, which involved scoring the physical condition of multifamily housing units, lacked sufficient input of the inspection process from the industry groups representing housing unit owners, the residents, and affected communities" and "Both GAO and NAPA conducted their own reviews of the REAC systems…and found significant systems problems…" (Page 13)

OIG Recommendation: "Tasks for the functional requirements and design phases include seeking out and incorporating end-user input." (Recommendation 2C)

REAC Response:

Point 1: The finding and recommendation are misleading and factually inaccurate as to the manner in which they refer to "users". The users of PASS are REAC contract inspectors, who use the system to inspect the properties, and REAC employees, who use the system to assess the quality of the inspection results. The OIG reports no issues with the users of the system.

SDM defines a user as a "Person who uses software/system to perform some task." Housing unit owners, residents and communities are not PASS users, as that term is defined by SDM, since they do not use the system to perform a task.

Point 2: The OIG concluded an audit in September of 1999 on the PASS system. They made three recommendations that have all been closed. They concluded that the system had the potential to be a useful tool for informed decision making once their recommendations were closed. This is a noteworthy accomplishment that should be reported by the OIG in accordance with Government Auditing Standards.

Point 3: The OIG's reference to GAO on page 13 is misleading and biased. The GAO issued an audit of PASS in July of 2000. While the GAO audit contained recommendations for improvements to the PASS quality assurance plan and reporting against that plan, it also was very complimentary of the PASS system. Nowhere does GAO state that they found "significant systems problems" as reported by the OIG. Furthermore, the OIG omits the positive statements made by GAO in their conclusion on page 28 of their report as follows:

> "The establishment of a new physical inspection system is a positive step by HUD to address weaknesses in its oversight of multifamily and public housing properties. In particular, the establishment of uniform standards and inspection procedures helps to address inconsistencies in the way standards were applied to HUD properties and in the way physical inspections were performed. Equally important, the establishment of centralized data bases for collecting information on the physical condition of these properties provided HUD not only with detailed, readily available data but also with a mechanism for (1) ensuring that deficiencies identified during inspections are corrected and (2) helping HUD take

Page 13 of 29

REAC's Comments

appropriate action against property owners and housing authorities that fail to provide housing that is decent, safe, sanitary and in good repair."

In addition, this same GAO report states, contrary to the OIG statements, that "HUD consulted representatives of the multifamily and public housing industries during both the development of its physical inspection system and recent revisions to it." The GAO audit of the PASS scoring system issued in November of 2000 contained no recommendations and an affirmation of the improvements already planned for the system.

Point 4: The OIG's reference to NAPA on page 13 is misleading and biased. The NAPA report was not performed in accordance with government auditing standards and therefore doesn't meet the requirements for objectivity, evidence, and appropriateness among other things. HUD notes this lack of balance in its published response to the NAPA report by stating the following:

> "Although the report notes in passing that 'the relationship between HUD and its private assisted housing partners appears relatively collegial,' it does not give this point the prominence it deserves, choosing instead to focus at length on the perceived problems with HUD's relationship with the public housing industry…the multifamily industry's acceptance of HUD's new monitoring system is yet another reason to question the assumption implicit in the draft report that the alleged inadequacy of HUD's consultation with industry in the development of HUD's new monitoring system represents a substantive—rather than a procedural flaw."

The Uniform Physical Condition Standards (UPCS) and the inspection protocol was developed with the assistance of one of the largest consulting firms in the nation and a nationally respected, 100 year old engineering firm. The engineering firm provided a certification that generally accepted engineering principles were used in the development of the protocol. During the development of the UPCS, HUD met repeatedly with industry representatives. After the initial inspection software was developed, HUD had further meetings with the industry groups in the winter of 1999 regarding definitions. As a result of those meetings, HUD revised the definitions to address industry concerns. These revised definitions were put into use in April 2000.

It is true that even after industry consultation, some industry officials continued to object to the inspection process. However, that opposition is not unexpected. As the OIG has pointed out in their audits of earlier times, HUD did not inspect any substantial portion of its portfolio and did not know the condition of the properties under its jurisdiction. The REAC inspections are now performed on the entire stock and HUD is identifying which housing providers are not providing decent, safe and sanitary housing. Under the old assessment system (PHMAP) PHAs self-certified their performance based on merely doing inspections, not on the results.

REAC's Comments

Like any new product, improvements enhance the quality of the product. The fact that there is planned improvement does not mean that the product was flawed in its initial release. This concept is well recognized in private industry, where new and improved releases are a regular occurrence.

While the Department made a point to provide NAPA with information on its extensive consultations, NAPA choose to ignore those activities and inaccurately report that HUD lacked such communications. A close examination of the NAPA report reveals that NAPA did no technical research or analysis of the UPCS or the protocol. Instead, NAPA chose to report only hearsay from industry meetings without evaluating the validity of the hearsay. Hence, NAPA's criticism of the UPCS fails any objective measure of scientific investigation.

Point 5: The OIG reports only one issue that is not sufficient to support a broad conclusion or a related recommendation in accordance with Government Auditing Standards.

REAC's Comments

Topic 10: Cost Benefit Analyses

OIG Finding: "Two REAC-wide cost benefit analyses for 1998 and 1999 included estimated REAC systems development costs but excluded any projected estimates for the systems tangible benefits. When projected benefits were provided they lacked support." (Page 14)

OIG Recommendation: "The initial work products for the SDM Initiate phase (feasibility studies, costs-benefit analyses, risk analyses) and the functional requirements identification phase will be accepted only if they are sufficiently adequate to support the remaining SDM development phases." (Recommendation 2B)

REAC Response:

Point 1: The Department's Benefit/Cost analyses guidance (which conforms with OMB guidance) does not require that tangible benefits be included in every cost benefit analyses. In fact, special provisions exist that apply to REAC as follows:

> "It is sometimes the case that a systems development initiative is undertaken to mitigate a material weakness identified through audit. This is both important and necessary. However, the mitigation of such risks does not lend itself well to valuing as a benefit. This is because the likelihood of such risks coming to pass is small and unknown -- not withstanding the amount of damage that could be done if they did come to pass. Therefore, the value of such estimates to a benefit cost analysis is marginal."

The several REAC Benefit/Cost benefit analyses provided to OIG listed the many material weaknesses identified by GAO and OIG and related program risks that needed to be addressed by the REAC information systems. The benefits to be realized by the new systems were also documented in those analyses. The cost benefit analysis included in the body of the OIG's 1999 audit of REAC was the evidence that closed a finding similar to the one presented above.

Point 2: Further, the Department's Benefit/Cost analysis methodology incorporates the concept of an economic analysis requirement. Economic analysis, within limitations, involves the assumptions, projections, and estimates of future events whose outcomes cannot be known with certainty until they occur. Because of these limitations, the Department's methodology allows an exemption for the economic analysis requirement of costs and benefits. Exemptions are allowed when legislative action or prior, high-level management decisions prevail. The Secretary's decision to reform HUD by creating the REAC meets the Department's criteria for exemption from the economic analysis requirement of REAC's projected costs and benefits.

REAC's Comments

Point 3: Nevertheless, the REAC did quantify expected benefits of its new business even though there was no old business practice to compare benefits against, and contrary to the OIGs assertion, these estimates are supportable as shown below.

The OIG reported for **PASS** that the REAC projected a savings of 2% of the estimated $6.1 billion outlay in operating subsidies to PHAs, totaling about $122 million as a result of PASS implementation.

PASS allows inspection data to be readily shared with HUD staff so that property owners and managers can efficiently repair identified defects. This enables property managers to strengthen their preventative and routine maintenance programs to maximize the useful life of assets. It is reasonable to expect that an improved maintenance approach would extend the useful life of housing units.

Based on the March/April 1998 AFE Facilities Engineering Journal, it is estimated that annual maintenance savings of between 10% and 20% can be realized when using a formalized preventative maintenance approach. The estimated maintenance costs for about 1.2 million Public Housing units is roughly $800 per unit, or $960 million annually. Accordingly, a 10% to 20% reduction in annual maintenance cost would save between $100 and 200 million per year.

Recently, in the July/August 2001 AFE Facilities Engineering Journal, the University of Minnesota estimates that they are saving between 7% and 10% from updating technology to support their maintenance program. This study further supports a significant cost savings for PASS implementation.

The OIG reported for **FASS FHA** that the REAC projected a 2% reduction in the Liability for Loan Guarantees as an initial estimate of savings from FASS-FHA implementation.

We viewed 2% as a relatively conservative estimate given the tremendous improvement in resource allocation provided by the system. The FASS-FHA financial rating allows asset managers to focus on the poorest performing section of the inventory. It is reasonable to expect that the ability to isolate troubled properties will lead to proactive asset management by the Office of Housing, and that this activity would reduce the overall number of claims.

We also realized that the data collected by FASS-FHA would lead to an Early Warning System based on predictive econometric modeling, which would further enhance the ability of FHA to mitigate loss due to financial default.

Point 4: REAC's initiation phase documents, including the cost benefit analyses, were rated outstanding by the CIO's independent review during fiscal year 2001. The CIO waived technical reviews of REAC projects as a result. Also during fiscal year 2001, these same documents were used by the CIO as a best practice in their project management training classes for all HUD project managers. And finally during the

REAC's Comments

annual ITIPS submission capital planning process, where the initiation phase documents are reviewed and scored, the REAC projects received some of the highest scores of all the projects in the HUD portfolio. This is a not a finding but in contrast is a noteworthy accomplishment that should be included in the report.

REAC's Comments

Topic 11: Deliverables Review

OIG Finding: "Our review of the contract product acceptance forms found that the teams reviews were not timely." (Page 15)

OIG Recommendation: "A maximum timeframe be established for project management teams' review of the contract product acceptance forms and that these documents be signed by all three team members." (Recommendation 2D)

REAC Response: The finding is misleading. The OIG has no idea when the deliverables were reviewed, only when they were signed. The REAC business operating model is that deliverables are reviewed as they are created. Creating deliverables is an iterative process whereby meetings are held, documents are produced and reviewed as sections are created and the system design is demonstrated as it is being developed. The final sign off in most cases is perfunctory, as the content is well known way in advance. Contractor status reports and observations of REAC employees and contractors evidence these facts. We disagree with the need for this recommendation. There are adequate compensating controls to assure that systems are built according to documented requirements.

The finding also exaggerates the seriousness of the problem since all 33 documents were signed by the project manager and most within a few weeks of receipt of the document from the contractor. Less than a dozen with longer delays, out of the thousands of deliverables that REAC received for all systems since the inception of the REAC, is not significant to support a recommendation. (The OIG does not state how many they reviewed to find the 33). The GTM and GTR signoffs are only for contract administration purposes and therefore the timeliness of their signature is not significant to the systems development process. Historically, these two parties have never had comments on the content of the deliverables. The recommendation is not addressed to the right party since the GTR on IT contracts does not work for REAC on systems development contracts and thus we do not have the authority to implement the recommendation for that party.

Page 19 of 29

REAC's Comments

Topic 12: Project Office

OIG Findings: "We found no evidence that the REAC project teams were verifying the reliability of project office data by reconciling it with PCAS data. (Page 15) "For example, Project office showed $1.18 million in FY 2000 labor costs from one contractor for the CASS system while PCAS shows only $63,287." (Page 15)

OIG Recommendation: "Project management teams to periodically reconcile the Project Office data with the PCAS data." (Recommendation 2E)

REAC Response: The OIG has reported information that is misleading in accordance with Government Auditing Standards (Paragraphs 7.54 and 7.58). Project Office data will not reconcile to PCAS because Project Office records the charges incurred by all REAC contractors – for both systems and non-system contracts – whereas PCAS only records payments for systems contracts. Non-systems charges are not recorded in PCAS. That is the explanation for the difference in the CASS system noted by the OIG in their report. In addition, Project Office records charges when they are incurred (usually weekly) whereas PCAS records charges when they are paid (usually monthly). This time lag can be many months after the charges were incurred depending on when the contractor submits an invoice and when the invoice is ultimately paid.

It is further noted the REAC is the only organization in HUD that uses Project Office to keep track of contract time and costs at the point they are incurred. Weekly, contractors enter their time incurred into Project Office and REAC project managers approve or reject the entries. This is a very strong control over contractor costs that the OIG fails to mention in their report. Government Auditing Standards says, "Auditors should report noteworthy accomplishments particularly when management improvements in one area may be applicable in another." (Paragraph 7.43) The REAC then receives and reconciles contractor invoices to Project Office data and approves or rejects billings based on that reconciliation. The REAC then forwards the adjusted invoices to the GTR (outside of REAC) to enter into PCAS for accounting and payment purposes. The procedures and controls followed by the REAC assure that contractors are only paid for time and charges incurred, which is the reason the Project Office system was implemented by REAC.

As to the recommendation, REAC periodically reconciles its records of contractual obligations with HUDCAPS (which is a higher level of accounting than PCAS) to assure that the HUD accountants have properly obligated all and only REAC approved funding. Documentation of this procedure was not requested by the OIG but it can easily be provided as evidence.

Page 20 of 29

REAC's Comments

Topic 13: Project Funding

OIG Finding: "Although the funding shortage was significant, the work stoppage might have been avoided if the REAC Project team had been closely monitoring the project costs against available funding levels." (Page 17) "…The (realignment) request was not approved because the schedules were too complicated" (page 16)

OIG Recommendation: "Project management teams closely monitor the project costs against available funding levels." (Recommendation 2F)

REAC Response: These findings are not factually accurate. It was the REAC's ability (not its inability) to monitor project costs against late budget approvals and delayed funding from program offices that allowed the REAC to forecast the shortfalls and resulting shut downs. REAC analyses, records of meetings with the program offices and official memorandum exist as evidence. Furthermore, the realignment request in question was evidence of exceptional project control (not lack of control) since it was done to ease administrative burdens on HUD IT budget staff that was having trouble making their adjustments in the new accounting system. REAC's exceptional project cost control is a noteworthy accomplishment that should be reported in accordance with Government Auditing Standards.

The findings are also misleading by not reporting the documented, unusual circumstances and difficulties faced by REAC during FY 2000 in accordance with Government Auditing Standards. As explained to the OIG on more than one occasion during their audit, some of these unusual circumstances are as follows:

- The fiscal year 2000 budget was not communicated to REAC until 4 months into the fiscal year and it contained large budget reductions.
- During those 4 months the REAC was instructed to spend at the August/September (fiscal year 1999) spending level, which was higher than the fiscal year 2000 budget eventually approved which made it extremely difficult to complete the remainder of the year without drastic cuts in service.
- New requirements were added for mandatory public housing assessment system (PHAS) rule changes.
- New criteria were added, only for REAC and no other program area, to obtain program office approval of projects scope and funding levels already approved by the Technology Investment Board. Many projects were cancelled as a result of this additional exercise.
- Promised program office funding was received late and in small lots versus a lump sum.

Page 21 of 29

REAC's Comments

- New accounting requirements that were subsequently abandoned as being too onerous.

During fiscal year 1998 and 1999, when there weren't all of these unusual circumstances and burdens imposed on the REAC, no such issues are noted and therefore this is a single instance that does not support a broad conclusion or recommendation in accordance with Government Auditing Standards.

If there is a finding that needs reporting at all it is that management should make timely budget decisions, and program entities should provide funding intact and in a timely manner since IT projects are long term; contractors need to make adequate commitments, and winding up and winding down of projects need a certain amount of time to assure orderly transitions. In accordance with Government Auditing Standards, such findings should be addressed to the parties that have the authority to act and address the cause of the problem, which in this case was not REAC.

REAC's Comments

Topic 14: Non IT Projects

OIG Finding: "During March 2000, REAC began to exclude some of its new project from the WCF" (Page 17)

OIG Recommendation: None

REAC Response: This is a factually inaccurate statement. No systems development projects were excluded from the WCF during March. Government Auditing Standards also requires that a finding contain sufficient, competent and relevant information to promote an adequate understanding of the matters reported. The OIG doesn't identify in the report and wasn't able to identify to us which contracts they mistakenly thought were excluded from the WCF.

During FY 1999, both REAC IT and MOBIS contracts were funded from HUD Working Capital Funds (WCF). In FY 2000, TIB excluded REAC MOBIS (non-IT) work from WCF funding. As a result, REAC Super MOBIS contracts were funded outside WCF funds obtained directly from program areas.

Page 23 of 29

REAC's Comments

Topic 15: Firm Fixed Price (FFP) Contracting

OIG Finding: The blanket purchase order agreements issued by the CPO for the REAC development contractors have been issued under the time and material (T&M) contracting method." (Page 18)

OIG Recommendation: "Project management teams prepare contractor scope of work documents that are specific and detailed and based upon detailed system functional requirements (with corresponding business rules) documents." (Recommendation 2G)

REAC Response: The finding that the OIG reports is neither a problem nor a deficiency. T&M contracts are a legitimate, Departmentally approved method for acquiring contract services for systems development projects. In fact, during the time of the OIG's review, T&M contracts were the Department's norm. As the OIG's own report states, only now is the Department "*moving toward* using a performance and outcome based, firm fixed price contracting method" (italics added). Nevertheless, REAC has been ahead of the curve, beginning the process of converting our T&M contracts to FFP early in FY 2000, before the OIG ended their fieldwork. The OIG's report omits this noteworthy accomplishment.

The recommendation based on this finding is not appropriate. REAC's IT managers already prepare contractor scope of work documents that are specific and detailed and based upon detailed system functional requirements (with corresponding business rules) documents. This is evidenced by the fact that REAC had already successfully awarded nine FFP IT contracts before the OIG released their draft report for our review. In fact, REAC was recently recognized by GAO as having the strongest system development requirements management practices in their Capability Maturity Model (CMM) audit report on five HUD systems. This is another noteworthy achievement not mentioned in the OIG's report.

Page 24 of 29

REAC's Comments

Topic 16: Background Investigations

OIG Finding: "At the time of our review, REAC did not know what types of security reports had been completed for its employees and contractors…" (page 20)

OIG Recommendation: "Periodically follow up with HUD's Human Resource Division on the completion status of all applicable required investigations and NACI's

REAC Response: This recommendation does not meet the requirements of Government Auditing Standards which state that "Recommendations are most constructive when they are directed at resolving the cause of the identified problems, are action oriented and specific, are addressed to the parties that have the authority to act, are feasible, and to the extent practical, are cost-effective." (Paragraph 7.23) The appropriate recommendation should be addressed to the HUD Human Resource Division and it should require them to produce a report periodically that describes the status of investigations for all of their customers including but not limited to REAC. Requiring all of the many HUD organizations to periodically pester the HUD Office of Human Resources is not only not directed at solving the cause of the problem; it could actually hinder their ability to get their work accomplished as they access and respond to all these calls.

REAC's Comments

Topic 17: Passwords

OIG Finding: "We…found written passwords taped to the computer workstations of two individuals. One was a REAC employee and the other was a REAC contractor. …the passwords did not pertain to any HUD system…" (page 21)

OIG Recommendation: "Conduct periodic physical security inspections of REAC offices. (Recommendation 3B)

REAC Response: This recommendation is not accordance with Government Auditing Standards because there is no finding and no significant weakness in controls. Two examples that are not findings and are not significant do not support a recommendation. In addition, as the report notes the REAC already conducts periodic security inspections of REAC offices on a regular basis.

Page 26 of 29

REAC's Comments

Topic 18: Card keys

OIG Finding: "…a key card was assigned to a vending machine personnel; we were not able to find signatures of the director and his deputy director in the original log…and a lead contractor had signed and was given key cards for four of his employees." (Page 22)

OIG Recommendation: Conduct periodic reviews of the inventory log of card key assignments. (Recommendation 3C)

REAC Response: These examples were not security lapse but rather were in accordance with reasonable and generally accepted practices. Each of the three instances is explained below:

- Portals building management assigns card keys to various individuals that provide building services such as cleaning personnel, building maintenance, building administrative personnel and building security personnel. Assigning a card key to a vending machine individual was consistent with generally accepted practice in the Portals Building and the HUD building. There are no requirements that we are aware of that preclude this procedure. It was not a security lapse.

- The Director and Deputy Director, upon establishing the REAC operations at the Portals building, obtained their key cards from the building management and were the ones responsible for creating the log to track assignments to all subsequent employees and contractors; this was not a security lapse.

- Issuing a block of cards to a lead contractor who would in turn control and reissue them to members of his team was also a practice deemed by us not to be a security lapse.

The REAC administrative officer performed reviews of the logs of card keys prior to, during and after the OIG's audit. No security lapses were noted and in fact the REAC's card key log is an internal control that is operating effectively that should be acknowledged in the report as a noteworthy accomplishment in accordance with Government Auditing Standards.

Page 27 of 29

REAC's Comments

Topic 19: Easily Guessed Passwords

OIG Finding: "…users had identified easily guessed passwords. " (page 22)

OIG Recommendation: "As an interim measure, periodically use the audit server software to identify easily guessed passwords." (recommendation 3D)

REAC comment: This recommendation was inappropriately assigned to the REAC. It should be assigned to the CIO who has the authority and tools to implement the recommendation. In fact, we inquired of the CIO and were informed that they run the audit server software every quarter and send the listing of employees with weak passwords to the ADP security staff that in turn sends an email notification to the affected employees.

Page 28 of 29

REAC's Comments

Topic 20: Configuration Management

OIG finding: None ascribed to REAC

OIG Recommendation: None assigned to REAC

REAC Response: REAC is aware that HUD's Chief Information Officer (CIO) responded to the OIG's findings and recommendation on this issue.

REAC concurs with the CIO's response. As the CIO makes clear, it was not accurate for the OIG to find that REAC should have been using the Configuration Builder component of PVCS. Configuration Builder is not an appropriate utility to use with Cold Fusion, the language in which REAC's systems were written. In the CIO's words "it would be counter-productive to create the same capability provided by the software manufacture and add potential for failure."

Beyond the CIO's response, however, REAC offers that our implementation of PVCS, where appropriate, was a noteworthy accomplishment that should be referenced in the OIG's audit report. The REAC has been utilizing PVCS software to control code since September 1999, prior to the start of the OIG audit. Working with the appropriate CIO Test Center and production staff, REAC has helped lead the Department's effort for full implementation and coordination of PVCS Version Manager. In fact, the CIO certified REAC as the first, complete PVCS implementation in HUD on July 31, 2001.

Page 29 of 29

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OIG Evaluation of REAC's Comments

Topic 1: Scope Limitation

REAC claimed that the scope of this audit was not restricted. However, we encountered numerous restrictions during the audit. REAC did not cooperate by timely providing readily available information to the audit team. A number of requested documents containing historical data, such as contractor time and cost charges, were delivered as late as six weeks after the initial requests, even though such information was readily available. This delay raised our concerns about the integrity of the information provided (i.e. whether the information was current, accurate, and complete). In addition, REAC's audit liaison representative monitored all meetings between OIG and REAC employees and contractors. This representative precluded contractors or other REAC employees from independently discussing any issues with the OIG auditors. As a result of the restrictions imposed and the instances where our alternate procedures were not sufficient to verify the information, we had no choice but to limit our audit scope and the use of the information accordingly. The scope limitation particularly affected our review of project management practices.

Topic 2: Timeliness of REAC Responses

REAC management generally believed that they had fully cooperated with the OIG during the audit. However, REAC's comments on this topic are not only factually inaccurate but also serves to reinforce the difficulties OIG encountered throughout the audit in our efforts to obtain information. The points REAC raised are in fact examples of hindrances we encountered as described below:

1. The REAC audit liaison representative requested a meeting with OIG to discuss audit results. However, he didn't show up for the meeting and called to cancelled it.

2. As indicated previously, the REAC audit liaison representative attended all meetings between OIG and contractors, and most meetings with REAC employees. His presence prohibited free and open discussions from the REAC employees and contractors.

3. REAC suspended, without notification, the audit team's access to the REAC electronic document library for approximately six weeks. After considerable efforts, the access was restored and we noticed additional documents were added to the library. The additional documentation included a number of previously requested documents by the audit team.

4. REAC did not initially provide the audit team electronic access to the Project Office database. As a result, we depended on hard copy printouts, which then had to be reviewed by REAC's Deputy Director. This resulted in longs delays, six weeks in some cases, before delivery of information to the OIG. In addition, we noticed discrepancies between the May 15, 2000 cost reports and the May 25, 2000 cost reports on costs incurred prior to May 15, 2000. Although REAC satisfactorily explained the differences

OIG Evaluation of REAC's Comments

between the two sets of reports, we had to spend considerable amount of time determining the reasons for these differences.

5. We requested in the beginning of April 2000, electronic access cards so we could conduct a physical security inspection as part of our audit. REAC delayed until July 2000 to provide us with the access cards. In addition, on July 6, 2000 REAC sent an email to its managers notifying them that OIG would be examining security and that the REAC Security Staff will officially begin monitoring security that day. We found no evidence to support REAC's assertion that security reviews are a routine practice.

6. For the physical security portion of the audit, we encountered another delay. We had originally requested the list of current electronic access cardholders on June 6, 2000. REAC provided the wrong document and did not deliver the corrected one until July 28, after another request was made.

7. When we requested the timesheets of contractor employees to determine whether work was being performed in accordance with HUD approved System Development Methodology, the REAC audit liaison representative was only willing to provide one timesheet record of his choice. He then indicated that the rest of the data would be so voluminous that he could not guarantee the accuracy of the data. His explanation appeared implausible. However, because we were able to rely on alternative audit procedures, and needed to complete the field work, we decided not to pursue this request.

Topic 3: Contractor Selections

OIG stands by our facts, calculations, and conclusions. We independently verified and calculated cost savings of over $1 million had REAC implemented proper cost control processes. Additionally, we found that one of the best valued contractors, who also charged a lower price to REAC, was not consistently used. We found no evidence that REAC had analyzed options to acquire the needed services in order to control development costs. According to the Federal Acquisition Regulations (FAR) citations 15.404-1(c)(2)(iii)(A) and (C), and 8.404(b)(5), Government entities such as REAC should control costs by paying reasonable costs for their contract services.

REAC's claim that the MOBIS contractors were not performing systems development work is not accurate. The MOBIS contractors were hired to develop the Functional Requirements Documents, business rules, and systems testing. All of these activities are essential components in the system development process. In fact, the MOBIS contractors were charging their time to the various Systems Development Methodology phases.

Another incorrect assertion REAC made is the statement that OIG misunderstood that the February 9, 1999 email message from the REAC deputy director referred to a work plan and not a proposal. Page 5 of the draft report issued on August 17, 2001 stated that "REAC did not issue

OIG Evaluation of REAC's Comments

the *task order* to the best qualified contractor. …." OIG understood that the contractor selection referred to in the email was for a task order, not a contract proposal.

Topic 4: Independent Panels

REAC's contention that the "MOBIS" contracts were not IT related is inaccurate. As we explained in the "Independent Panel…" section of Finding 1 of the report, the task orders clearly show that the three schedule MOBIS contractors were assisting in developing the functional requirements and business processes and in providing design input for the various system automation projects. Work in this area clearly is IT related. As a result, an independent technical review panel should have been convened to evaluate the contractor proposals before award.

Topic 5: Off-Site Billing Rates

REAC's contention that the reported excessive payments for one contractor employee are isolated is possibly accurate. However, the overpayments transpired for close to a year. If REAC had been performing periodic review of contractor rates, the overpayments would have been detected by REAC rather than during the audit.

Topic 6: Access to documents

REAC's contention is without merit. As described on Point 7 under Topic 2, REAC appeared unwilling to share timesheets of contractor employees with the OIG. Also, REAC's claim that this information was available to OIG in electronic format is incorrect. The information that OIG shows in Appendix A of the report was from a different data table than the timesheet records in Project Office. REAC did not inform the OIG about the timesheet data table until the end of the fieldwork.

Topic 7: Lifecycle Models

OIG stands by our facts and conclusion. REAC's claim to have used the Evolutionary model for the SDM lifecycle is not accurate. A full explanation of our conclusion in this area is provided in the section "SDM Phases Are Not Done in Chronological Order" under Finding 2 of the report.

Topic 8: System Capacity and Performance

OIG stands by our facts and conclusion. Documentation from REAC showed they anticipated a surge of users and asked IT for additional capacity. However, we found no evidence indicating that REAC conducted sufficient capacity analysis or capacity testing. We concluded from an extensive review of documentation for the FASS/FHA system that REAC did not perform a statistical analysis of what was required in order for the system to accommodate a surge of users. Although IT is responsible for capacity planning, it is incumbent upon REAC to test the capability of the application to handle the workload volume before placing a system into

OIG Evaluation of REAC's Comments

production. REAC did not request IT to address capacity until one version of the system was completed and the development of the next version was initiated. Also, REAC hired Booz, Allen & Hamilton, in part, to examine system performance issues. They issued a report on January 18, 2000, which stated that one of the steps REAC needed to do was to establish a Performance Management team and define metrics for capacity planning purposes. This report showed that REAC did not adequately consider capacity issues prior to placing systems under production. The system was deployed in 1999 and 1998.

We also discussed capacity planning with an IT manager who stated that REAC wanted to complete the systems and did not want to delay development by testing the capacity of the systems to handle the volume of transactions they were anticipating. The IT manager said IT offered to provide Silk Performer, a stress testing program to REAC, but that REAC did not want to delay the release of their applications. During this interview, REAC staff admitted that they could have done a better job in stress testing the application.

Topic 9: User Involvement

Point 1: OIG concurs with REAC that "users" is not an accurate word to use. We changed the wording "users" to "stakeholders."

Point 2: REAC quoted a 1999 OIG audit report from our Boston office that the PASS system "had the potential to be a useful tool for informed decision making." We agree with this quote. However, a system developed can only be considered a success if it provides useful information or functional capabilities for the stakeholders. As a result, stakeholders involvement is key to a successful system development effort.

Points 3 & 4: OIG has modified the report by separating NAPA's and GAO's conclusions regarding REAC systems. However, this change does not affect our conclusions regarding involvement of stakeholders during system development.

Point 5: REAC's assertion that our conclusion is based on one issue is inaccurate. We independently corroborated concerns raised by both NAPA and GAO that (1) REAC did not adequately provide feedback to stakeholders; and (2) the result of the inadequate feedback was extremely high Corrective and Adaptive Maintenance costs for the PASS SDM phase (42 percent of total costs).

Topic 10: Cost Benefit Analysis

Point 1: REAC's quote asserting HUD's guidance on cost/benefit analysis does not require REAC to define tangible benefits in every cost/benefit analysis is misleading. Under the section "Cost Benefit Analysis…" of Finding 2, we described the reason why REAC must define the benefits of the proposed system. The OIG in a previous OIG audit and in this review found REAC's cost benefit analyses inadequate.

OIG Evaluation of REAC's Comments

Point 2: REAC's justification to be exempted from the economic analysis requirement of REAC's projected cost and benefits on the basis that the former HUD Secretary decided to reform HUD is questionable. Cost benefit analysis is crucial for management to make cost effective IT investment decisions. REAC should perform the proper analyses for its projects to ensure that the benefits for each outweigh the costs.

Point 3: OIG determined that two FY 2000 cost benefit analyses (PASS and FASS-FHA) were inadequate because neither one provides proper support for how REAC determined the following project returns on investment. In REAC's response to the OIG draft report, they indicate that other surveys indicate 7 to 20 percent reduction in annual maintenance costs if preventative maintenance is done. However, REAC's unsupported 2 percent amounts represent savings in operating subsidies for the PASS system and reduction in liability for loan guarantees for FASS FHA. Maintenance costs savings are not necessarily related to operating subsidies or liability for loan guarantees.

Point 4: The claim that CIO rated REAC's initiation phase documentation as outstanding is not relevant to the audit. Our audit scope did not include corroboration of the CIO's evaluation of REAC's project.

Topic 11: Deliverables Review

REAC's assertion that this finding is misleading and exaggerated is without merit. As OIG indicated in Point 5 of Topic 9, we found that the PASS system had significant Corrective and Adaptive Maintenance costs for the PASS SDM. The delay in reviewing and signing off on deliverables could have significantly contributed to this situation. As shown in Appendix B, it took as long as five months for a review signoff. Deliverables should be timely reviewed by REAC program managers and GTMs to minimize errors and omissions, especially on deliverables that are key to the development efforts.

Topic 12: Project Office

REAC claimed that the finding is misleading. This assertion has no merit. As described in "Project Office Data Were Not Reconciled To PCAS Data" in Finding 2, reconciling the incurred cost data in both systems is crucial for fund control and IT capital planning purposes.

Topic 13: Project Funding

We disagree with REAC's assertion that the findings are not accurate. REAC did not properly manage the available funding they had for the various contractors. Although it is true that funding from some of the program offices was at times late and not consistent, had REAC properly monitored available funding levels it would not have been necessary to make significant realignments late in the year as we have indicated in our report and noted in Appendix C. REAC

OIG Evaluation of REAC's Comments

had indicated that they have documentation to support their allegation that there were justifications for the late realignment, but they did not provide any supporting documentation to us.

OIG verified with one contractor that there was an impact to the project delivery schedules because of the necessity of the OCPO's office to issue a stop work order to one of REAC's main contractors that kept them idle for eight days. It was then necessary for work to be redistributed among other contractors.

Topic 14: Non-IT Projects

REAC again asserted that the MOBIS contract work was not IT related. As described above in Topics 3 and 4, it is our opinion that MOBIS work is IT related, and therefore, the funding should have been controlled through the Working Capital Fund.

Topic 15: Firm Fixed Price (FFP) Contracting

REAC comment that our finding is neither a problem nor a deficiency is not a valid statement. The use of FFP contracts when applicable can help to reduce REAC's contract costs. We noted that during our audit, REAC began using more fixed price contracts. Our recommendation remains because REAC is relying on outside consultants to assist in defining system requirements. This means that REAC has the capability to develop well-defined requirements. As a result, REAC should be increasing the use of FFP contracts rather than time and material contracts.

Topic 16: Background Investigations

REAC misinterpreted the intent of our finding by stating that the recommendation does not meet the requirements of Government Auditing Standards. This recommendation fully complies with all of the appropriate auditing standards. The intent of the finding is to recommend that REAC follow up to ensure that contractor and HUD employees have been adequately screened before granting system access to critical and sensitive data. Since we have reported concerns regarding personnel security and have addressed the responsibilities of the Human Resources Office, it is not necessary to repeat that discussion in this report.

Topic 17: Passwords

The recommendation complies with all of the auditing standards. Both REAC and our inspection noted a number of security weaknesses. However, REAC conducted physical security inspections only after OIG's notification that we intended to conduct a similar inspection as part of the audit. As described in Topic 2, there is no evidence to support REAC's assertion that security reviews are a routine practice.

OIG Evaluation of REAC's Comments

Topic 18: Card Keys

REAC's comments indicate a lack of concern over physical access control. The card key issued to a vending machine employee is not an acceptable practice because this individual has not been screened for security risks. While HUD may issue cards to suppliers and other outside maintenance workers, there are guards at all entrances to ensure that personnel do not remove items without authorization. The building where REAC is located has no guards at the entrances.

With respect to the key card logs, even the keys assigned to the Director and Deputy Director should be recorded and signed in the log. Regardless of the official positions, signatures on the log are important as an audit trail that can be used to verify that the card has been charged to the person stated in the record.

Regarding the individual with multiple key cards, this practice creates a lack of accountability, since a card can be charged to someone, but never be given to that person.

With respect to the assertion that REAC periodically reviewed the logs, REAC did not provide the evidence that we requested to indicate such reviews were performed.

Topic 19: Easily Guessed Passwords

REAC's assertion that password monitoring is the sole responsibility of the CIO is misguided. According to OMB Circular A-130 and the Government Information Security Reform Act, REAC management has a critical role in ensuring that their information resources are adequately protected. REAC must manage security practices of its employees, including password settings. REAC should take a proactive approach and coordinate with the CIO to minimize the use of weak passwords.

Topic 20: Configuration Management

Our finding did positively acknowledge REAC's use of PVCS in its development efforts. In a meeting with the CIO's office, we were informed that applications were compiled using other configuration management tools. Accordingly we modified the report as appropriate. In addition, the CIO agreed that there was no version control for REAC applications from the point where REAC submitted the application to be placed into production. Subsequent to our field work, the CIO implemented PVCS Version Manager. Since this finding was directed to the CIO's office and not REAC, we have responded to the CIO's comments in that section.

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The Honorable Dan Burton, Chairman, Committee on Government Reform
2185 Rayburn Bldg., House of Representatives, Washington, DC 20515
The Honorable Henry A. Waxman, Ranking Member, Committee on Government
Reform, 2204 Rayburn Bldg., House of Representatives, Washington, DC 20515
Andy Cochran, House Committee on Financial Services, 2129 Rayburn H.O.B
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