Office of the Inspector General

September 28, 2000

William A. Halter
Deputy Commissioner
  of Social Security

Inspector General

Management Advisory Report - Implementation of the Social Security Administration's
Integrated Human Resources System (A-14-99-92009)

The attached Management Advisory Report presents the results of our review of the
Social Security Administration's (SSA) implementation of its Integrated Human Resources
System (IHRS).  The objectives of our review were to determine whether SSA's IHRS
(1) is being implemented cost-effectively, (2) will meet the needs of SSA's users, and
(3) can handle SSA's human resource workloads.  Based on the information available at
the time of our review, we have concerns that the system will not satisfy users' needs or
meet all of SSA's human resource workloads.

Please comment within 60 days from the date of this memorandum on corrective action
taken or planned on each recommendation.  If you wish to discuss the final report, please
call me or have your staff contact Steven L. Schaeffer, Assistant Inspector General for
Audit, at (410) 965-9700.


                                    James G. Huse, Jr.


Attachment

## OFFICE OF
## THE INSPECTOR GENERAL

## SOCIAL SECURITY ADMINISTRATION

## IMPLEMENTATION OF THE SOCIAL SECURITY ADMINISTRATION'S INTEGRATED HUMAN RESOURCES SYSTEM

**September 2000**     **A-14-99-92009**

# MANAGEMENT
# ADVISORY REPORT

# EXECUTIVE SUMMARY

## OBJECTIVES

The objectives of our review were to determine whether Social Security Administration's (SSA) Integrated Human Resources System (IHRS) (1) is being implemented cost-effectively, (2) will meet the needs of SSA's users, and (3) can handle SSA's human resource (HR) workloads.

## BACKGROUND

SSA uses the automated Human Resources Management Information System (HRMIS) to provide both cyclical reporting functions and an automated facility. However, the input processes for HRMIS tend to be manual at the staff and first-line managerial levels. Workload transaction control functions often depend on stand-alone personal computer-based systems or are maintained manually. Furthermore, HRMIS does not capture information relating to several HR business processes. SSA intends IHRS to replace HRMIS. SSA stated that, while HRMIS is in no apparent danger of any short-term failure, it is an older system that will be increasingly harder and more costly to maintain. It is also less capable of adapting to new technologies and business processes. SSA also stated that it needs to follow Federal guidance to replace aging systems with commercial-off-the-shelf (COTS) software in its systems environment. In 1996, SSA awarded a $16.5 million, 5-year contract to Anderson Consulting to acquire the PeopleSoft HR COTS and technical support services for its implementation.

## RESULTS OF REVIEW

While conducting our preliminary audit work, we identified certain issues that management should know before it makes critical decisions regarding the continued funding of the IHRS project. The problems we identified are not unique to SSA, and we considered this in our assessment. We summarized significant IHRS project events associated with its contractual history, fiscal oversight, implementation strategy, and user satisfaction.

## CONCLUSIONS AND RECOMMENDATIONS

Since SSA awarded the contract in 1996, SSA has not received a fully functional IHRS product within the planned time frames. At the end of Fiscal Year (FY) 1999, SSA had spent $13.9 million of the $16.5 million total contract value, and had approved the remaining $2.6 million for FY 2000. SSA has implemented only a portion of the IHRS software in a pilot mode. In addition, SSA does not have any formal estimates of how long it will take to achieve full IHRS functionality or what this will cost.

Before committing future funding on IHRS, SSA needs to address these issues. Therefore, we recommend SSA:

- Re-evaluate the project and address the issues of fiscal oversight, escalating costs, and project delays.

- Complete a risk analysis before implementing any future IHRS releases, as currently required by the Clinger-Cohen Act.

- Complete a cost-effectiveness analysis for IHRS.

- Complete a new project work plan with cost projections, milestones and estimated future task orders, and update them periodically.

- Do not approve future funding for IHRS until SSA components forward IHRS' project work plans and milestones to Information Technology Systems Review Staff.

- Document the rationale and basis for funding decisions.

- Develop a plan to reduce or minimize software problems before implementing future releases of IHRS in pilot mode.

For future projects similar to IHRS, SSA needs to be more diligent to ensure it is getting a good value for its money and document the basis for its decisions. SSA may also need to terminate projects where the cost-benefit ratio or cost-effectiveness does not support continuing a project.

## AGENCY COMMENTS

In its response, SSA agreed with our recommendations. SSA has indicated that, by the end of FY 2000, it will award a contract for an independent review of the current PeopleSoft-related IHRS project. SSA has further stated that the contractor and/or SSA will complete each of the steps outlined in the Office of the Inspector General recommendations.

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# INTRODUCTION

## OBJECTIVES

The objectives of this review were to determine whether the Social Security Administration's (SSA) Integrated Human Resources System (IHRS) (1) is being implemented cost-effectively, (2) will meet the needs of SSA's users, and (3) can handle SSA's human resource (HR) workloads.

## BACKGROUND

SSA uses the automated Human Resources Management Information System (HRMIS) to provide both cyclical reporting functions and an automated facility. However, the input processes for HRMIS tend to be manual at the staff and first-line managerial levels. Workload transaction control functions often depend on stand-alone, personal computer-based systems or are maintained manually. Furthermore, HRMIS does not capture information relating to several HR business processes. During our review, SSA made convincing arguments for the implementation of IHRS as a replacement for HRMIS. SSA stated that, while HRMIS is in no apparent danger of any short-term failure, it is an older system that will be increasingly harder and more costly to maintain. It is also less capable of adapting to new technologies and business processes. SSA also stated it needs to follow Federal guidance by replacing aging systems with commercial-off-the-shelf (COTS) software in its systems environment.

On June 23, 1995, SSA approved a *Request for Contract* for the IHRS project. IHRS was intended to automate workflow functions and HR business processes and provide an information management system. The Agency then distributed requests for proposals to 145 prospective offerors in November 1995. On January 3, 1996 (the closing date for receiving offers), the Agency received two proposals—one from Andersen Consulting and the other from PricewaterhouseCoopers. Both offerors proposed the same COTS package—PeopleSoft Human Resources. SSA established a Technical Evaluation Committee to conduct a technical evaluation of the proposals, and the Office of Acquisition and Grants performed a cost evaluation. In May 1996, the Technical Evaluation Committee recommended the award be made to Andersen Consulting. The Source Evaluation Board approved the award.

SSA, like many other Federal agencies, viewed the use of a COTS package as a viable option for meeting the information technology needs of its HR functions. SSA believed using a COTS package would reduce overall project risk, especially in software development schedule, cost, and reliability areas. SSA also anticipated that a COTS package would provide a minimum of 60 percent functionality "out-of-the-box." Also, after customization, SSA expected the COTS package to achieve 100 percent functionality.

SSA was required to follow numerous Federal laws and guidelines in developing IHRS, such as Office of Management and Budget (OMB) Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs,* revised October 29, 1992*.* The Circular provides guidelines to Federal agencies' decisions to initiate, renew, or expand programs or projects that will extend for 3 or more years into the future. The Information Technology Management Reform Act of 1996, now known as the Clinger-Cohen Act (CCA), established more stringent requirements specifically for Information Technology projects, such as IHRS, and became effective shortly after the IHRS contract was awarded.[1] The CCA required the establishment of a Chief Information Officer (CIO), independent assessments of Information Technology projects, and a well-defined capital planning and investment control process. SSA's Information Technology Systems Review Staff (ITSRS) serves as the principal independent source of advice to the CIO, the CIO's core team, and the advisory council on matters relating to Information Technology and Information Resources Management.

## SCOPE AND METHODOLOGY

We held an entrance conference with Agency representatives on June 29, 1999. At that time, we initiated our field work. We reviewed relevant documentation, including cost-benefit analyses (CBA), contracts, meeting minutes, spreadsheets, and other pertinent documents. We also interviewed the Deputy Commissioners for Systems and HR and their staffs, the Director of ITSRS, current and former Project Managers, IHRS pilot participants, and other Federal users of the PeopleSoft COTS software. We conducted our review from April through September 1999 primarily at SSA Headquarters in Baltimore, Maryland. We also spoke with users at the IHRS pilot site in Kansas City, Missouri, and the Federal PeopleSoft Users' Network in Washington D. C., as well as other Federal agencies.[2]

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[1] The CCA was enacted on February 10, 1996, and became effective on August 8, 1996.

[2] We spoke with the Department of Veterans' Affairs; Department of Justice, Bureau of Prisons; Department of Commerce, Bureau of the Census; National Security Agency; and the Administrative Office of the United States Courts.

# RESULTS OF REVIEW

While conducting our preliminary audit work, we identified certain issues that management should know before it makes critical decisions regarding the continued funding of the IHRS project. The problems we identified are not unique to SSA, and we considered this in our assessment. Below is a summary of significant IHRS project events associated with its contractual history, fiscal oversight, implementation strategy, and user satisfaction.

The IHRS project was initiated when the Deputy Commissioner for HR requested a preliminary CBA and Requirements and Alternatives Analysis be prepared in November and December 1994, respectively (and revised in April and May 1995). Under these analyses, four alternatives were considered: (1) maintain the current HRMIS system, (2) develop IHRS in-house, (3) develop IHRS using contractor personnel, and (4) acquire a COTS package to satisfy IHRS requirements. SSA selected the fourth alternative.

The 1994 and 1995 CBAs lacked a provision for contractor costs and instead, showed SSA personnel costs only for software development, as follows.

**Table 1: Estimated Project Costs**
**(From April 1995 CBA Data)**

| Cost Category | Estimated Cost |
|---|---|
| Salaries - New Development (SSA personnel) | $4,840,000 |
| Salaries - Ongoing Maintenance (SSA personnel) | 3,261,000 |
| HRMIS Costs | 500,000 |
| COTS Software<br>        Purchase<br>        Maintenance | <br>5,000,000<br>4,500,000 |
| **Total Costs** | **$18,101,000** |
| Math Error in CBA | 350,000 |
| **Total Costs in Raw Dollars** | **$18,451,000** |
| *Costs Adjusted for Inflation* | *$19,658,000* |
| *Costs Presented in 1996 Dollars* | *$15,979,000* |

In April 1995, the Office of Information Management (OIM) submitted a budget justification for IHRS funding to ITSRS for Fiscal Years (FY) 1996-2001.[3] OIM requested $5.2 million for FY 1996 based on $9,861,000 estimated total project costs through FY 2001, as follows.

**Table 2:  Estimated Project Cost**
**(At Beginning of the project)**

| Fiscal Year | Estimated Funding |
|---|---|
| 1996 | $5,200,000 |
| 1997 | 988,000 |
| 1998 | 1,250,000 |
| 1999 | 950,000 |
| 2000 | 850,000 |
| 2001 | 623,000 |
| **TOTAL** | **$9,861,000** |

In June 1995, ITSRS recommended that funding be approved as previously requested based on the $9,861,000 estimated total project cost.  ITSRS did not receive a formal CBA with OIM's budget request, although OIM provided portions of a draft CBA.

On June 25, 1996, SSA awarded Andersen Consulting a fixed-price indefinite quantity contract with a base term of 12 months (plus four 12-month options to extend the contract's term).  The maximum contract value was $16,520,577 ($6,659,577 more than SSA's original budget estimate of $9,861,000).  The purpose of the contract was to acquire a COTS software package (for example, PeopleSoft HR) and provide the support services necessary to customize and implement the software.  The minimum (required) and optional costs for each contract year were agreed (per the contract) as follows.

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[3]  OIM, acting on behalf of, and after consulting with, the user component (HR), in accordance with the formal budgeting procedures in place within the Office of Systems, prepared IHRS budget justifications and requests for submission to ITSRS through the Deputy Commissioner for Systems.  OIM also responded to budget questions from ITSRS and attended periodic investment review meetings in conjunction with representatives from the HR, Systems, and Financial Management components.  While we frequently refer to financial and budget activities in this report as being performed by OIM, in essence, many of the financial management aspects of IHRS were the responsibility of several components.

### Table 3: Agreed Upon Contract Value By Year

| | Software and Annual Maintenance (Required) | Customization and Technical Services (Optional) | Contract Value (Maximum) |
|---|---|---|---|
| Contract Year 1 | $3,139,131 | $2,267,479 | $5,406,610 |
| Contract Year 2 | 469,320 | 2,103,677 | 2,572,997 |
| Contract Year 3 | 504,516 | 2,182,004 | 2,686,520 |
| Contract Year 4 | 542,352 | 2,291,526 | 2,833,878 |
| Contract Year 5 | 583,032 | 2,187,940 | 2,770,972 |
| Other Costs (Any Year) | | 249,600 | 249,600 |
| **TOTALS** | **$5,238,351** | **$11,282,226** | **$16,520,577** |

Also, according to the contract, the contractor agreed to automate the following 11 HR business processes.

1. Employee Benefits
2. Employee Services
3. Employee Training and Development
4. Equal Employment Opportunity
5. Labor Management Relations
6. Performance Management and Incentives
7. Organization Management
8. Position Classification
9. Recruitment
10. Management of Appointments and Separations
11. Process Official Personnel Actions

SSA later restructured these 11 HR business processes and reorganized them into 16 HR business process categories.

On January 23, 1997, the Agency and the contractor modified the contract to reallocate all of the technical services costs from 5 years to the first 2 years of the contract and shift labor hours from the computer programmer category (at $66.12 per hour) to the program management category (at $252.81 per hour).  This shift resulted in a 31,480-hour reduction in total labor hours available under the contract (from 100,800 to 69,320 hours), but the maximum contract value did not change.  The Agency's justification for this modification was based on its belief that the software would require "minimum customization from the out-of-box solution."

Also in January 1997, OIM submitted a request to increase its original FY 1997 budget request of $988,000 to $8,000,000—a $7,012,000 increase.  OIM based the increase

on two factors. First, the Source Selection Advisory Committee decided to award the contract in excess of the total estimated project budget amount by $6,659,577. Second, the strategy for the project had changed to front-load technical services resulting in delivery of full IHRS functionality within the first 2 years of the contract. ITSRS responded to OIM by requesting additional information (for example, project work plans, estimated funding, and milestone data) in support of budget justification and project strategy approval.

On May 15, 1997, ITSRS concluded the 1994 and 1995 CBAs were outdated and did not represent "an appropriate business case for today's investment decision" and recommended another CBA be completed. The CIO approved FY 1997 funding to enable continuation of work pending completion of a new CBA.

In June 1997, the contractor prepared the Final Release Strategy needed to achieve full IHRS functionality (however, the Final Release Strategy was subsequently revised in July 1997, February 1998, and March 1998). The June 1997 Strategy presented 4 separate releases encompassing 16 HR business processes over a 5-year period, with implementation starting in October 1998 and ending in September 2001 (see Table 4 below). The Strategy was revised with minor changes in July 1997, but still presented 4 separate releases encompassing 16 HR business processes over a 5-year period.

## Table 4: IHRS Release Strategy
### (As of June/July 1997)

| Release Number | Business Processes (as of June & July 1997) |
|---|---|
| Release One | • Salary Administration<br>• Employee Hire<br>• Employee Maintenance<br>• Position Management<br>• Performance Management<br>• Selection & Recruitment |
| Planned Implementation Dates | 10/1/98 |
| Release Two | • Training Administration<br>• Career Planning<br>• Labor Relations<br>• Health & Safety<br>• Government Regulations |
| Planned Implementation Dates | 4/1/99 |
| Release Three | • Benefits |
| Planned Implementation Dates | 3/1/00 |
| Release Four | • Suggestions<br>• Employee Assistance Program<br>• Student Programs<br>• Worklife Enrichment |
| Planned Implementation Dates | 9/1/01 |

Also in June 1997, OIM requested an additional $1,178,000 above prior approved budgeted amounts for FYs 1998-2001.  Based on the information OIM provided, ITSRS concluded in July 1997 "projected costs . . . significantly exceed the originally projected benefits."  As a result, ITSRS recommended that additional funding not be provided until a new CBA could be completed.

In October 1997, the Deputy Commissioners for HR; Systems; and Finance, Management and Assessment met with the CIO to discuss IHRS and to determine whether to continue funding.  They agreed that future meetings would be held every 90 days to review IHRS.  The CIO agreed to provide $962,235 in additional funding for IHRS through January 31, 1998.

A new IHRS CBA was completed in November 1997.  However, this CBA included only two alternatives: maintain the old HRMIS or implement IHRS using PeopleSoft COTS. SSA excluded the other two previously considered alternatives (in-house development and in-house development with vendor support) from this CBA.  The CBA assumed IHRS Release One would become operational in October 1998, with full national operational capability by September 2001.  Sixteen business processes were included in the IHRS CBA.

In February 1998, SSA revised the Release Strategy a third time to reflect events that had invalidated many of the previous assumptions and facts.  Salary Administration was removed from Release One and split among Releases Two and Four instead.  This occurred because SSA could not resolve problems with the interface with its external payroll provider.

**Table 5:  Changes in Release Strategy**
**(As of February 1998)**

| Release Number | Business Processes (as of June & July 1997) | Business Processes (as of February 1998) |
|---|---|---|
| Release One | • Salary Administration<br>• Employee Hire<br>• Employee Maintenance<br>• Position Management<br>• Performance Management<br>• Selection & Recruitment | • Position Management (partial)<br>• Performance Management<br>• Selection & Recruitment (partial)<br>• Labor Relations (partial) – Grievance Tracking portion<br>• Training Administration (partial) |
| Planned Implementation Dates | 10/1/98 | 1/2/99 |
| Release Two | • Training Administration<br>• Career Planning<br>• Labor Relations<br>• Health & Safety<br>• Government Regulations | • Labor Relations (partial)<br>• Health & Safety (partial)<br>• Government Regulations (partial)<br>• Salary Administration (partial)<br>• Employee Hire<br>• Position Management (partial)<br>• Selection & Recruitment (partial) |
| Planned Implementation Dates | 4/1/99 | 1/2/00 |
| Release Three | • Benefits | • Benefits<br>• Career Planning<br>• Suggestions<br>• Student Programs<br>• Worklife Enrichment<br>• Employee Assistance Program |
| Planned Implementation Dates | 3/1/00 | 1/2/01 |
| Release Four | • Suggestions<br>• Employee Assistance Program<br>• Student Programs<br>• Worklife Enrichment | • Health & Safety (partial)<br>• Labor Relations<br>• Government Regulations (partial)<br>• Salary Administration (partial) |
| Planned Implementation Dates | 9/1/01 | 7/5/01 |

In March 1998, SSA revised the Release Strategy a fourth time to remove Releases Three and Four from the implementation plan.  Overall functionality was reduced because the number of business processes to be included in IHRS was reduced from 16 to 7.  SSA removed Salary Administration, Employee Hire, Employee Maintenance, Training Administration, Career Planning, Benefits, Suggestions, Employee Assistance Program, Student Programs, and Worklife Enrichment from the Release Strategy.  This is not to say that SSA did not intend to build these business processes into IHRS, but rather it is viewed as an acknowledgement by SSA that those functions would not be possible under the current contract and project plan.

While SSA anticipated Releases One and Two would be implemented in January 1999 and January 2000, respectively, Release One was only released as a pilot in March 1999. Also, as of April 2000, IHRS Release One had not been fully implemented Agencywide, and the January 2000 implementation date for Release Two has not been met.

**Table 6:  Changes in Release Strategy**
**(As of March 1998).**

| Release Number | Business Processes (as of June & July 1997) | Business Processes (as of February 1998) | Business Processes (as of March 1998) |
|---|---|---|---|
| Release One | • Salary Administration<br>• Employee Hire<br>• Employee Maintenance<br>• Position Management<br>• Performance Management<br>• Selection & Recruitment | • Position Management (partial)<br>• Performance Management<br>• Selection & Recruitment (partial)<br>• Labor Relations (partial) - Grievance Tracking portion<br>• Training Administration (partial) | • Labor Relations (partial) -Grievance Tracking portion<br>• Position Management<br>• Selection & Recruitment<br>• Performance Management |
| Planned Implementation Dates | 10/1/98 | 1/2/99 | 1/2/99 |
| Release Two | • Training Administration<br>• Career Planning<br>• Labor Relations<br>• Health & Safety<br>• Government Regulations | • Labor Relations (partial)<br>• Health & Safety (partial)<br>• Government Regulations (partial)<br>• Salary Administration (partial)<br>• Employee Hire<br>• Position Management (partial)<br>• Selection & Recruitment (partial) | • Labor Relations<br>• Health & Safety<br>• Government Regulations |
| Planned Implementation Dates | 4/1/99 | 1/2/00 | 1/2/00 |
| Release Three | • Benefits | • Benefits<br>• Career Planning<br>• Suggestions<br>• Student Programs<br>• Worklife Enrichment | |
| Planned Implementation Dates | 3/1/00 | 1/2/01 | |
| Release Four | • Suggestions<br>• Employee Assistance Program<br>• Student Programs<br>• Worklife Enrichment | • Health & Safety (partial)<br>• Labor Relations<br>• Government Regulations (partial)<br>• Salary Administration (partial) | |
| Planned Implementation Dates | 9/1/01 | 7/5/01 | |

Also in May 1998, ITSRS requested additional documentation, such as the CBA, budget request, and work plan, from OIM for the investment review meeting scheduled for July 1998.  ITSRS also requested information pertaining to progress made toward target dates and deliverables presented in the work plan and progress toward payroll integration and future IHRS releases.

OIM submitted its annual IHRS budget request for FY 1999.  The request included a $2,008,000 increase over previously estimated project costs for FY 1999.  ITSRS placed the funds in a reserve account pending the CIO's decision to approve continued IHRS funding.  At a July 1998 CIO investment review meeting, the Office of Workforce Analysis (OWA) was commissioned to analyze IHRS.

**Table 7:  IHRS Budget Request for FY 1999**
**(As of July 1998)**

| Fiscal Year | Original Project Estimate | OIM Request |
|---|---|---|
| 1996 | $5,200,000 | $5,200,000 |
| 1997 | 988,000 | 1,350,000 |
| 1998 | 1,250,000 | 3,567,000 |
| 1999 | 950,000 | 2,958,000 |
| 2000 | 850,000 | 639,000 |
| 2001 | 623,000 | 1,738,000 |
| TOTAL | $9,861,000 | $15,452,000 |

The pilot for Release One, originally scheduled for October 1998 in Kansas City and selected Headquarters components, was delayed until March 1, 1999.

OWA began its evaluation of the initial IHRS pilot release in April 1999 and issued a report on May 20, 1999.  Pilot users gave mixed responses when asked about IHRS functionality.  OWA interviewed 31 users in the Kansas City region and 50 participants at Headquarters who had used the software.  OWA's evaluation report stated the Kansas City pilot users indicated greater overall dissatisfaction with the IHRS software than Headquarters participants.  For example, Kansas City users were dissatisfied with the lack of "user-friendly" functionality (data input terms were too technical and input screens were too cumbersome), additional inputs to process many actions, and the requirement to input duplicate data into HRMIS.  Some actions still required time-consuming manual processing and resulted in decreased productivity, thwarting efforts to provide timely information to managers.  While users in Headquarters were more satisfied with IHRS' overall functionality, both the Kansas City and Headquarters users believe IHRS could benefit them in the future if the problems can be adequately resolved.

On May 21, 1999, the CIO approved additional funding of $1,188,026 through September 30, 1999, for Release One support, program management, and PeopleSoft maintenance. In June 1999, OIM submitted a new budget request for $6,094,000 for FYs 2000 through 2005.

**Table 8: IHRS Budget Request for FY 2000**
**(As of July 1999)**

| Fiscal Year | Original Project Estimate | OIM Requested (Approved by CIO) |
|---|---|---|
| 1996 | $5,200,000 | $5,200,000 |
| 1997 | 988,000 | 1,350,000 |
| 1998 | 1,250,000 | 3,567,000 |
| 1999 | 950,000 | 2,849,000 |
| 2000 | 850,000 | 2,569,000 |
| 2001 | 623,000 | 624,000 |
| 2002 | 0 | 664,000 |
| 2003 | 0 | 705,000 |
| 2004 | 0 | 745,000 |
| 2005 | 0 | 787,000 |
| **TOTAL** | **$9,861,000** | **$19,060,000** |

In July and August 1999, we interviewed staff in Kansas City and Headquarters, and our conclusions were consistent with OWA's April 1999 survey. Also, in our discussions with other Federal agencies and the Federal PeopleSoft Users' Network, we found some resistance to change to a PeopleSoft based HR system was almost universal among Federal agencies.

On September 7, 1999, we briefed SSA managers and their staffs on our preliminary findings and recommended that SSA stop funding IHRS until the issues outlined in this report are resolved. We also gave SSA until mid-November 1999 to provide us with any additional information it felt might affect our audit work. SSA did provide us with a limited amount of additional information; however, that information did not change our conclusions. On September 10, 1999, the CIO approved an additional $2,635,924 for IHRS funding through FY 2000 for continued life-cycle support, program management, and PeopleSoft maintenance.

# CONCLUSIONS AND RECOMMENDATIONS

Since SSA awarded the contract in 1996, it has not received a fully functional IHRS product within the planned time frames.  By the end of FY 1999, SSA had spent $13.9 million of the $16.5 million total contract value and had approved the remaining $2.6 million for FY 2000.  SSA has implemented only a portion of the IHRS software in a pilot mode.  In addition, SSA did not have any formal estimates of how long it will take to achieve full IHRS functionality or what this will cost.

We recognize the problems SSA is experiencing in implementing IHRS are common among Federal users implementing a PeopleSoft HR system, and we considered this in our assessment.  There are, however, several steps SSA could have taken to mitigate the unexpected costs and delays it experienced.

First, SSA should have completed a risk analysis, as required by CCA.  While SSA was not required to complete a risk analysis of IHRS because the project was initiated before the effective date of CCA, we believe good business practice requires an assessment of risk before any major systems development project is initiated.  A risk analysis would have alerted SSA to the potential for extensive unexpected costs and project delays.  For example, SSA would have been better able to anticipate project delays and higher costs had it considered the technology used to develop IHRS (that is, client/server architecture) was new to the Agency and, according to an SSA official, the Agency did not have the experience and expertise to make the transition easily.

Second, when the expected cost of the project increased 67 percent (from $9.9 million to $16.5 million), SSA management should have re-evaluated the project in light of this information.  SSA top management we spoke with dismissed the increased cost as something that is a normal occurrence at the beginning of a project at SSA.  SSA needs to base its decisions on better financial information.  The CBAs were outdated, inaccurate, or incomplete because the presumptions and assumptions SSA used in the CBAs were not revised to accurately reflect actual events and plans and did not provide a revised estimated project plan midway through the project.  When unexpectedly high costs and expanded time frames occur at the beginning of a project, SSA needs to prepare realistic projections of what the project is going to cost and how long it is going to take, and determine whether the project continues to be viable.  OMB Circular A-94 suggests a cost-effectiveness analysis could be used in cases where a policy decision has already been made that the benefits must be provided.  In such cases, a CBA, such as SSA used, would not be the most useful tool because it compares the current system with possible alternatives.  Midway through the IHRS project, it would have been more realistic to prepare a cost-effectiveness analysis rather than a new CBA with only two alternatives considered (that is, keeping the old system versus continuing with the PeopleSoft HR-COTS alternative).

Third, ITSRS, the component that is tasked as being a major advisor to the CIO, needs to assert its role in the systems development process. ITSRS did not initiate a change in the investment review process until May 1998. At that point, ITSRS began requesting project work plans, estimated funding and milestone data from OIM, in addition to CBA data. We can find no record that OIM provided this information to ITSRS, and OIM was not certain it had provided all of the requested information. ITSRS must be allowed to require the Office of Systems to provide it with project work plans and milestones before it makes recommendations, and before the CIO approves funding for a project. Project work plans and milestones, as required under CCA, would have allowed ITSRS to more closely follow IHRS development and recognize in a more timely manner when the project became behind schedule and over budget.

Fourth, we had a difficult time determining exactly what information was presented and discussed during the periodic investment review meetings, during which important funding decisions were made. This is because the rationale for such decisions was not clearly documented for our review. In the future, SSA should carefully document the details of its discussions and meetings, including funding decisions, so that when these decisions are reviewed, the reasons and basis for those decisions will be adequately supported.

Fifth, while we commend SSA for correcting many of the operational problems it experienced during the initial piloting of Release One, SSA still needs to be more diligent to ensure that future IHRS releases more effectively meet user needs before going into the pilot mode. According to an SSA official, one of the reasons IHRS experienced delays and higher costs was because the Agency had not standardized its business processes before developing the software. Therefore, we believe SSA should be more precise in the requirements and development phases to ensure minimization of software problems before releasing it in pilot because it is more costly to correct errors with new software in later stages of development. It also leads to greater dissatisfaction among users and resistance to adopting the new software.

Before committing future funding on IHRS, SSA needs to address these issues. Therefore, we recommend SSA:

1. Re-evaluate the project and address the issues of fiscal oversight, escalating costs, and project delays.

2. Complete a risk analysis before implementing any future IHRS releases, as required by CCA.

3. Complete a cost-effectiveness analysis for IHRS.

4. Complete a new project work plan with cost projections, milestones and estimated future task orders, and update them periodically.

5. Do not approve future funding for IHRS until SSA components forward IHRS' project work plans and milestones to ITSRS.

6. Document the rationale and basis for funding decisions.

7. Develop a plan to reduce or minimize software problems before implementing future releases of IHRS in pilot mode.

For future projects similar to IHRS, SSA needs to adhere to the CCA, be more diligent to ensure that SSA is getting a good value for its money, and document the basis for its decisions. SSA may also need to terminate projects where the cost-benefit ratio or cost-effectiveness does not support continuance of a project.

## AGENCY COMMENTS

In its response, SSA agreed with our recommendations. SSA has indicated that, by the end of FY 2000, it will award a contract for an independent review of the current PeopleSoft-related IHRS project. SSA has further stated that the contractor and/or SSA will complete each of the steps outlined in the Office of the Inspector General recommendations.

# APPENDICES

# ACRONYMS

| | |
|---|---|
| CBA | Cost-Benefit Analysis |
| CCA | Clinger-Cohen Act |
| CIO | Chief Information Officer |
| COTS | Commercial-Off-The-Shelf |
| FY | Fiscal Year |
| HR | Human Resources |
| HRMIS | Human Resources Management Information System |
| IHRS | Integrated Human Resources System |
| ITSRS | Information Technology Systems Review Staff |
| OIM | Office of Information Management |
| OMB | Office of Management and Budget |
| OWA | Office of Workforce Analysis |
| SSA | Social Security Administration |

# AGENCY COMMENTS

COMMENTS ON THE OFFICE OF THE INSPECTOR GENERAL (OIG) DRAFT REPORT, "IMPLEMENTATION OF THE SOCIAL SECURITY ADMINISTRATION'S INTEGRATED HUMAN RESOURCES SYSTEM" (A-14-99-92009)

Thank you for the opportunity to review this OIG draft report.  We agree generally with the report's findings and recommendations, and are considering them as we re-evaluate the Integrated Human Resources System (IHRS).  By the end of fiscal year 2000, we plan to award a contract for an independent review of the current PeopleSoft-related IHRS project status compared to the original project goals and objectives.


Recommendation 1

Re-evaluate the project and address the issues of fiscal oversight, escalating costs, and project delays.

Comment

We agree.  As noted above, we will soon award a contract for an independent review of the current PeopleSoft-related IHRS project.

Recommendation 2

Complete a risk analysis before implementing any future IHRS releases, as required by the Clinger-Cohen Act (CCA).

Comment

We agree. As part of the upcoming independent review of the current IHRS, we are requesting that the contractor lay out alternatives for proceeding with the current IHRS project with pros and cons for each.   A risk analysis will be completed prior to proceeding with IHRS.

Recommendation 3

Complete a cost-effectiveness analysis for IHRS.

Comment

We agree.  We will complete a cost-effectiveness analysis before making a decision on whether to proceed.

Recommendation 4

Complete a new project work plan with cost projections, milestones and estimated future task orders, and update them periodically.

Comment

We agree. Once the independent review of the current IHRS has been completed, if a decision is made to proceed with the current PeopleSoft IHRS, we will renew the IHRS planning consistent with the approach outlined in this recommendation.

Recommendation 5

Do not approve future funding for IHRS until SSA components forward IHRS' project work plans and milestones to the Information Technology Systems Review Staff (ITSRS).

Comment

We agree. ITSRS will continue to be involved in the review of the current PeopleSoft-related IHRS work plans and milestones.

Recommendation 6

Document the rationale and basis for funding decisions.

Comment

We agree that including documentation that supports funding decisions in decisional memoranda facilitates the subsequent review of decisions made.  In efforts such as IHRS, such documentation is often extensive, and determinations are made concerning which documentation is appropriate for inclusion in decisional memoranda.  However, as we proceed with system development efforts, we will ensure that adequate supporting documentation is attached to decisional memoranda to facilitate subsequent review of planning decisions.

Recommendation 7

Develop a plan to reduce or minimize software problems before implementing future releases of the IHRS in pilot mode.

Comment

We agree.  When the risk analysis is conducted on the current IHRS project, we will ensure that it includes an assessment of potential software problems and lays out a strategy for mitigating those risks.

# OIG Contacts and
# Staff Acknowledgments

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