

**YEAR 2000 (Y2K) AND OTHER SOCIAL  
SECURITY INFORMATION TECHNOLOGY ISSUES**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON SOCIAL SECURITY  
OF THE  
COMMITTEE ON WAYS AND MEANS  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

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JULY 29, 1999  
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**Serial 106-14**

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**YEAR 2000 (Y2K) AND OTHER SOCIAL  
SECURITY INFORMATION TECHNOLOGY  
ISSUES**

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**THURSDAY, JULY 29, 1999**

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON WAYS AND MEANS,  
SUBCOMMITTEE ON SOCIAL SECURITY,  
*Washington, DC.*

The Subcommittee met, pursuant to call, at 10:10 a.m., in room B-318, Rayburn House Office Building, Hon. E. Clay Shaw, Jr. (Chairman of the Subcommittee), presiding.

[The advisory announcing the hearing follows:]

# **ADVISORY**

FROM THE COMMITTEE ON WAYS AND MEANS

## **SUBCOMMITTEE ON SOCIAL SECURITY**

FOR IMMEDIATE RELEASE

CONTACT: (202) 225-9263

July 22, 1999

No. SS-7

### **Shaw Announces Hearing on Y2K and Other Social Security Information Technology Issues**

Congressman E. Clay Shaw, Jr., (R-FL), Chairman, Subcommittee on Social Security of the Committee on Ways and Means, today announced that the Subcommittee will hold a hearing on Year 2000 (Y2K) and other Social Security information technology issues. The hearing will take place on Thursday, July 29, 1999, in room B-318 of the Rayburn House Office Building, beginning at 10 a.m.

Oral testimony at this hearing will be from invited witnesses only. Witnesses will include experts from the U.S. General Accounting Office (GAO), which has examined Social Security information technology systems, and the Social Security Administration (SSA). However, any individual or organization not scheduled for an oral appearance may submit a written statement for consideration by the Committee and for inclusion in the printed record of the hearing.

#### **BACKGROUND:**

The effective use of information technology is essential to Social Security's mission of providing timely and accurate benefits to more than 44 million Americans. As with other government programs, computers have come to play a critical part in Social Security's ability to process benefit applications, screen for errors and possible fraud, and provide timely benefits. Given the importance of information technology to SSA's mission and the program challenges presented by the Baby Boom generation as it approaches retirement age, the Subcommittee has asked GAO to review SSA progress in several areas, including readiness for Y2K, implementation of its Intelligent Workstation/Local Area Network (IWS/LAN) initiative, and development of a Reengineered Disability System (RDS). This hearing will explore the results of that review.

In announcing the hearing, Chairman Shaw stated: "Computer systems are vital to ensuring that Americans receive the Social Security benefits they have come to expect in a timely and affordable manner. This hearing will be a final check to ensure that Social Security is fully ready for Y2K. Beyond Y2K, it is vital that we ensure that Social Security's computer systems are up to the task now, well before the Baby Boom approaches retirement age and begins drawing disability and retirement benefits in large numbers."

#### **FOCUS OF THE HEARING:**

The hearing will focus on SSA progress in implementing key information technology initiatives, including readiness for Y2K, implementation of its IWS/LAN initiative, and development of a RDS.

**DETAILS FOR SUBMISSION OF WRITTEN COMMENTS:**

Any person or organization wishing to submit a written statement for the printed record of the hearing should submit six (6) single-spaced copies of their statement, along with an IBM compatible 3.5-inch diskette in WordPerfect 5.1 format, with their name, address, and hearing date noted on a label, by the *close of business*, Thursday, August 12, 1999, to A.L. Singleton, Chief of Staff, Committee on Ways and Means, U.S. House of Representatives, 1102 Longworth House Office Building, Washington, D.C. 20515. If those filing written statements wish to have their statements distributed to the press and interested public at the hearing, they may deliver 200 additional copies for this purpose to the Subcommittee on Social Security office, room B-316 Rayburn House Office Building, by close of business the day before the hearing.

**FORMATTING REQUIREMENTS:**

Each statement presented for printing to the Committee by a witness, any written statement or exhibit submitted for the printed record or any written comments in response to a request for written comments must conform to the guidelines listed below. Any statement or exhibit not in compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

1. All statements and any accompanying exhibits for printing must be submitted on an IBM compatible 3.5-inch diskette in WordPerfect 5.1 format, typed in single space and may not exceed a total of 10 pages including attachments. Witnesses are advised that the Committee will rely on electronic submissions for printing the official hearing record.

2. Copies of whole documents submitted as exhibit material will not be accepted for printing. Instead, exhibit material should be referenced and quoted or paraphrased. All exhibit material not meeting these specifications will be maintained in the Committee files for review and use by the Committee.

3. A witness appearing at a public hearing, or submitting a statement for the record of a public hearing, or submitting written comments in response to a published request for comments by the Committee, must include on his statement or submission a list of all clients, persons, or organizations on whose behalf the witness appears.

4. A supplemental sheet must accompany each statement listing the name, company, address, telephone and fax numbers where the witness or the designated representative may be reached. This supplemental sheet will not be included in the printed record.

The above restrictions and limitations apply only to material being submitted for printing. Statements and exhibits or supplementary material submitted solely for distribution to the Members, the press, and the public during the course of a public hearing may be submitted in other forms.

Note: All Committee advisories and news releases are available on the World Wide Web at "[http://www.house.gov/ways\\_means/](http://www.house.gov/ways_means/)".

The Committee seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202-225-1721 or 202-226-3411 TTD/TTY in advance of the event (four business days notice is requested). Questions with regard to special accommodation needs in general (including availability of Committee materials in alternative formats) may be directed to the Committee as noted above.

Chairman SHAW. Good morning. Right now, there is still a Republican conference going on, so that explains the absence of our Republican Members, who will be in shortly, I am sure.

Today, the Subcommittee will explore how the Social Security Administration is preparing for the year 2000 and other information technology challenges that lie ahead.

The effective use of information technology is essential to Social Security's mission of providing timely and accurate benefits to more than 44 million Americans today and to tens of millions or more in the coming years as the baby boom generation approaches retirement age.

Simply put, without effective computer systems, Social Security will be unable to efficiently process benefit applications, screen for errors and possible fraud, and provide timely benefits. Delivering on the promise of providing world class service to Social Security's customers, American workers and retirees, would be impossible without effective information technology.

Given the importance of information technology to SSA's mission today and especially in the future, the Subcommittee has asked the General Accounting Office to review SSA progress in several areas, including readiness for Y2K implementation of its intelligent workstation/local area network or IWS/LAN, for those of you who are into that, initiative, and development of a Reengineered Disability System, also called RDS.

Can we delete these abbreviations from my statements in the future?

[The opening statement follows:]

**Opening Statement of Hon. E. Clay Shaw, Jr., a Representative in Congress from the State of Florida**

Today the Subcommittee will explore how the Social Security Administration is preparing for the Year 2000 and the other information technology challenges that lay ahead.

The effective use of information technology is essential to Social Security's mission of providing timely and accurate benefits to more than 44 million Americans today, and to tens of millions more in the coming years as the Baby Boom generation approaches retirement age. Simply put, without effective computer systems Social Security would be unable to efficiently process benefit applications, screen for errors and possible fraud, and provide timely benefits.

Delivering on the promise of providing world-class service to Social Security's customers—American workers and retirees—would be impossible without effective information technology.

Given the importance of information technology to SSA's mission today and especially in the future, the Subcommittee has asked GAO to review SSA progress in several areas, including readiness for Y2K, implementation of its Intelligent Workstation/Local Area Network (or "IWS/LAN") initiative, and development of a Reengineered Disability System (also called RDS). This hearing will explore the results of that review. We are pleased to welcome the Commissioner of Social Security, Ken Apfel, and the Director of the General Accounting Office's Civil Agencies Information Systems group, Joel Willemsen, to provide their perspectives and help us answer many questions we have.

Chairman SHAW. We are pleased to welcome the Commissioner of Social Security, Ken Apfel, and the Director of the General Accounting Office's Civil Agencies Information Systems, Joel Willemsen, to provide their perspectives and help us answer the many questions that we might have. And I might say that, from all of the indications that I have, the Social Security Administration has really been a leader in getting the technology ready, for which I think congratulations are in order.

Mr. Matsui is presently in the Capitol on the floor, and if he gets here, it will be later this morning. But, Mr. Levin, do you have an opening statement that you would like to make?

Mr. LEVIN. Yes, I do.

As you mentioned, Mr. Matsui is tied up on matters that, as I understand, are immense.

Chairman SHAW. Something that has to do with water in his district.

Mr. LEVIN. It relates to the Sacramento area.

The Social Security Administration currently faces two major information technologies. One, preparation for the year 2000, is an immediate and well-publicized challenge. The other, implementation of new technologies to enhance productivity and to improve customer service, is not as widely discussed but is still vitally important.

In preparing for Y2K, the bar has been set relatively high for SSA, and justifiably so. With the possible exception of the IRS, the American people interact with SSA more than any Federal agency, leading to a high degree of visibility for the agency and to a considerable amount of attention to any Y2K miscue. More importantly, Social Security benefit payments are a lifeline for millions of Americans. Any disruption of that lifeline could prove disastrous.

Nonetheless, SSA is on the verge of clearing that bar. All of SSA's own computers were certified as Y2K compliant in December of last year, while the agency has either completely or almost completely resolved concerns raised by GAO about Y2K compliance among State Disability Determination Services, data exchanges with noncompliant employees or vendors, and contingency plans to ensure benefit payments are made in time.

Moreover, SSA has taken on a leadership role within the Federal Government, and many of the approaches it has used to prepare for Y2K have been adopted as best practices by other agencies. In fact, SSA has received—has consistently received high marks from the House Subcommittee on government Management, Information and Technology, chaired by Congressman Stephen Horn. Since August of last year, SSA has received straight As, as you know—

Mr. Apfel, did you get report cards always like that?

Mr. APFEL. No, sir. [Laughter.]

Mr. LEVIN [continuing]. On the Subcommittee's Year 2000 Progress Report Card, and the National Science Foundation is the only other Federal agency with that record.

In implementing new technologies, SSA has recognized that the retirement of the baby boom generation will pose a challenge not just for the program's finances, but for the agency's work force as well. More and more retirees will, of course, mean more and more Social Security claims. To meet this challenge and to allow its employees to process more claims more quickly and more accurately, SSA has a number of information technology initiatives underway.

To update its information technology infrastructure, SSA recently completed the installation of over 70,000 new personal computer workstations throughout the agency. We look forward to hearing the contributions SSA expects these computers to make to enhance productivity and lower operating costs.

Similarly, we look forward to hearing from SSA on how it intends to proceed with its—Mr. Chairman, you referred to this Re-engineered Disability System, RDS—initiative now that Booz-Allen & Hamilton has issued its final report evaluating the initiative and



has recommended that the agency discontinue the initiative. Implementing a system so that all the various components within that agency that participate in the disability claims process can share information in a timely and standardized fashion will be vital to the continued success of the disability insurance program.

Importantly, we look forward to hearing from the SSA on how it intends to cope with the funding cuts that the present Republican budget will entail for the agency over the next decade. The mammoth tax cut that has been forced through the House last week is premised on major cuts in discretionary spending over the next 10 years. These cuts would include a 28-percent cut in SSA's administrative budget in 2009, relative to what is needed to keep pace with inflation after 1999. We sincerely doubt that any amount of automation or any other information technology initiative would allow SSA to continue to manage the Social Security Program—just as the baby boom generation begins to retire.

Thank you, Mr. Chairman.

Chairman SHAW. I don't think that the bill you refer to has been reported out yet as to the cut in the administrative costs, so I am not sure that is correct, Sandy.

Mr. LEVIN. These are observations.

Chairman SHAW. Mr. Commissioner, proceed.

**STATEMENT OF HON. KENNETH S. APFEL, COMMISSIONER OF SOCIAL SECURITY, SOCIAL SECURITY ADMINISTRATION; ACCOMPANIED BY D. DEAN MESTERHARM, DEPUTY COMMISSIONER FOR SYSTEMS; KATHLEEN M. ADAMS, ASSISTANT DEPUTY COMMISSIONER FOR SYSTEMS; AND JUDY CHESSER, DEPUTY COMMISSIONER FOR LEGISLATION AND CONGRESSIONAL AFFAIRS**

Mr. APFEL. Thank you, Mr. Chairman and Members of the Subcommittee, for inviting me to testify about Social Security's progress on implementing information technology, IT, initiatives. These initiatives are essential to managing our workloads now and in the future.

Accompanying me today are Dean Mesterharm, our Deputy Commissioner for Systems, and Kathy Adams, our Assistant Deputy Commissioner for Systems, who really have been remarkable over the years in Social Security's endeavors. Also behind me, as always, is Judy Chesser, on crutches today, but with us fully.

It is clear that technology—

Chairman SHAW. Were you kicking people? Is that what happened?

Ms. CHESSER. Yes.

Mr. APFEL. Sometimes the Commissioner.

It is clear that technology is indispensable to SSA's success in achieving the goals set forth in the agency's strategic plan. As you yourself have noted, Mr. Chairman, computers will play a critical role in our ability to process benefit applications, pay benefits in a timely way, and guard against fraud.

From 1992 through 1999, Social Security spent \$4.3 billion on IT and systems. My testimony today will focus on how we have invested those resources and what benefits have been realized.

Like everyone else, we have been preparing for the dawn of the new century. I am glad to report that our benefit payment system is year 2000 compliant. As we like to say, we are Y2K OK. We continue to work with the Treasury Department and the Federal Reserve to identify any year 2000 issues that might affect direct deposits. So far, we have not identified any.

We have also developed a detailed strategy for the last days of 1999 and the first days of 2000, our day one strategy. To every extent possible, Social Security's facilities and systems will be fully operational on January 3, 2000, the first business day of the new century. However, if a problem should occur, the Treasury Department will immediately issue a replacement Social Security check, and Social Security offices will provide emergency payment services to people with critical needs. I, personally, do not consider our job done until timely and correct benefit payments are in the hands of all of our beneficiaries.

Next, I would like to mention our customer-responsive service delivery system providing employees ready access to the information they need to serve the public. This system—our IWS/LAN—is one of the largest information technology initiatives ever undertaken in the Federal Government.

We have successfully installed more than 75,000 workstations and 1,742 LANs in Social Security and in our State DDS offices. We did this without interrupting workflow and thus without interrupting public service. The IWS/LAN system provides a standardized platform and architecture that now exists throughout Social Security, the State Disability Determination System, and our hearings and appeals offices. This technology already is helping us take claims more efficiently and provide better online service to national 800-number callers.

In order to improve service, in 1992 we began the Reengineered Disability System, known today as RDS. While we originally planned a single system supporting all SSA components involved in the disability process, we learned that this was not the best solution.

Because of performance problems, we contracted with Booz-Allen and Hamilton to independently evaluate the RDS process and to make recommendations. Based partly on these recommendations, we will build on the strengths of the existing software systems already in place and electronically link them to a new, automated field office disability system, based on the system we piloted in the Virginia offices.

Roughly half of our \$71 million investment continues to be applicable to the new strategy. Included are valuable software packages that will strengthen the disability application process and enhance its cost effectiveness.

Like our success with IWS/LAN and Y2K, Social Security needs to continue applying information technology advances to improve our disability claims process. Right now, if you walked into one of our offices to file a disability claim, the Social Security representative would complete a detailed paper questionnaire documenting your disability and then mail it on, along with the rest of the folder, to the State Disability Determination System. This paper-based system is not appropriate for the 21st century.

Last, we are very excited as we prepare to send out our newly designed, annual Social Security Statement, the largest customized mailing ever undertaken by the Federal Government. Beginning in October, we will issue approximately 10 million statements each month to workers 25 and older. The statements will provide estimates of Social Security retirement, disability and survivors benefits, together with a record of worker's earnings.

Mr. Chairman, Social Security's ability to use technology and improve systems is critical to our success as an agency. The Ways and Means Committee developed legislation passed recently by the House that includes provisions for data matches and other program integrity provisions, and I would like to commend the Committee for these efforts.

H.R. 1802 expands our ability to do computer matches for SSI applicants and beneficiaries. Data matches such as these will help SSA to use technology to continuously guard our program's integrity.

I am proud to report that SSA is only one of two government agencies to receive an A grade in management of information technology from the government Performance Project at Syracuse University's Maxwell School of Citizenship and Public Affairs.

Use of technology has already enabled Social Security to significantly improve the services it provides to the American people. For example, in 1992, it took 6 weeks for a person to receive a Social Security card. Now it takes 5 days. In 1982, Social Security needed 3 weeks' computer processing time to calculate the annual COLA, now it is done in 24 hours.

There are other examples in my written testimony.

I am pleased with these achievements, and I believe that our commitment to technology will enable us to do even better.

Throughout our 65-year history, Social Security has made a vital difference in the lives of Americans. As demonstrated in our Agency Strategic Plan, we have ambitious goals; and I am proud of those computer systems achievements that will help us reach them.

I look forward to working closely with you on these goals and would be happy to answer any questions you have.

[The prepared statement follows:]

**Statement of Hon. Kenneth S. Apfel, Commissioner of Social Security,  
Social Security Administration**

Mr. Chairman and Members of the Subcommittee:

Thank you for inviting me to testify about the Social Security Administration's (SSA) progress on implementing information technology initiatives. These initiatives are critically important when we consider that our ability to manage our workloads now—and in the future—rests on our ability to use technology extensively and effectively, and I am proud of SSA's achievements in this area.

It is clear technology has been, and will continue to be indispensable to SSA's success in achieving the goals set forth in the Agency Strategic Plan. The success of goals such as the ability to deliver customer-responsive, world class service, to make SSA program management the best in the business, with zero tolerance for fraud and abuse, and to be an employer that values and invests in each employee, is directly linked to SSA's ability to apply advances in technology. As you yourself have noted, Mr. Chairman, computers will play a critical role in our ability to process benefit applications, pay benefits timely, and guard against fraud.

From 1992 through 1999, SSA has spent \$4.3 billion on information technology to support its programs. These costs include funds spent from the Information Technology Systems budget, the automation investment fund, and salaries and expenses of information technology personnel. My testimony today will focus on how we have

invested those resources and what benefits have been returned as a result of those investments. The areas I will discuss today are: SSA's preparedness for the Year 2000; automation of our disability processes; a project to provide our employees with workstations with the capability to process claims and respond to customer inquiries (also known as the Intelligent Workstation/Local Area Network or IWS/LAN project); and issuance of Social Security Statements (formerly known as Personal Earnings and Benefit Estimate Statements, or PEBES).

#### YEAR 2000

Preparing for the change of century date—from 1999 to 2000—is one of the biggest challenges ever to face the technology industry. At SSA our national computer center maintains and operates hundreds of mission-critical systems supported by over 35 million lines of in-house computer code, as well as hundreds of commercial off-the-shelf vendor products that had to be reviewed and changed where necessary to ensure that January 2000 payments will be made correctly and on time to the nearly 50 million Social Security and Supplemental Security Income (SSI) beneficiaries who could be affected by the Year 2000 (or Y2K) changeover.

I want to thank the Subcommittee for holding this hearing and for your efforts in making the public aware of SSA's progress to make sure that we will pay benefits timely and that SSA's system will function as it should. As I testified before the Ways and Means Committee in February, SSA's benefit payment system is Year 2000 compliant. As we like to say, "We are Y2K OK." We have worked closely with the Treasury Department, Federal Reserve, and the Postal Service to ensure that Social Security and Supplemental Security Income (SSI) checks and direct deposit payments for January will be paid on time. Since October 1998, payments for both Social Security and SSI programs have been made with Year 2000-compliant systems at both SSA and Treasury.

We worked with the State Disability Determination Services (DDS) to make sure that the 55 State DDSs that have automated systems to support the disability determination process are Year 2000 compliant. I am happy to report that as of January 1999 all of the State DDS systems are Year 2000 compliant, tested, and implemented.

We recognize that it is not enough for SSA to be Year 2000 compliant if our trading partners are not ready. We have worked very closely with all of our trading partners. I am pleased to report that all outgoing data exchanges are Year 2000 compliant and implemented. All but three of our incoming data exchanges are compliant and implemented. The remaining three are in testing and will be implemented in early August 1999.

We have worked hard to make sure that all of our mission critical systems are Year 2000 compliant, and now we are taking steps to make sure that we do not introduce possible date defects into these systems. Whenever a system that has been Year 2000 certified is changed due to legislation or other requirements, we are recertifying the system to make sure it is still Year 2000 compliant. In addition, beginning this month we have instituted a moratorium on installation of commercial off-the-shelf software and mainframe products, and we will impose a similar moratorium in September for discretionary changes to our own software. The moratoriums will be in place through March 2000.

We have developed a detailed strategy that comprises the comprehensive set of actions that will be executed during the last days of 1999 and the first days of 2000. The strategy also includes the activities leading up to the critical century rollover date, such as identification of key personnel involved, preparation of facilities checklists, establishment of the Y2K command center, a schedule for testing all systems over the weekend, and other activities. Implementation of the strategy will ensure, to the extent possible, that SSA's facilities and systems will be fully operational on January 3, 2000—the first business day of the new century. That is, service to the public and our trading partners will continue without interruption due to the change of century date.

Finally, we recognize that our system depends on infrastructure services, such as the power grid or the telecommunications industry and third parties, which are beyond our control. In March 1998, SSA completed its Y2K Business Continuity and Contingency Plan, which is updated quarterly. The plan identifies potential risks to Agency business processes, ways to mitigate each risk, and strategies to ensure continuity of operations.

As part of the plan, we have in place local plans for each of our field offices, tele-service centers, processing centers, hearings offices, and State DDSs. We have also developed contingency plans for benefit payment and delivery. We continue to work closely with the Treasury Department and the Federal Reserve to identify any Year

2000 issues that might affect direct deposit payments. While we have not identified any so far, if a problem should occur in January, the Treasury Department will quickly issue a replacement Social Security check, and SSA offices will provide emergency payment services to beneficiaries with critical needs. I do not consider Social Security's job done until timely and correct benefits are in the hands of all of our beneficiaries.

I know that we are all concerned about ensuring that all beneficiaries are paid on time, but I want to be sure to urge you to resist proposals to make the January 2000 Social Security benefit payment in December 1999. After a thorough review of the pros and cons of making payments early, the Administration determined that such action is not necessary given the readiness of agency payment systems and business continuity and contingency plans.

We believe that there are risks associated with making payments early. Such actions could easily be interpreted by the public as an indicator of the government's inability to make automated payments in January 2000. Such a signal could prove disastrous if citizens decide to withdraw their currency in anticipation of a disruption in benefits or other payments, or try to cancel electronic payments and revert to check payments. At this point, the damage that could result from public over-reaction could be far more serious than technology risks resulting from potential Year 2000 problems. Moreover, providing early payments in December could require the government and industry to make additional programming changes to account for the payments with the requisite testing of those systems and would raise a number of difficult tax policy issues if there were a move to extend early payments of other transactions in the public or private sector beyond simply Social Security payments.

#### IWS/LAN PROJECT

As a part of our strategic goal of delivering customer-responsive, world class service and our strategy for providing employees ready access to the information they need to serve the public as described in SSA's Strategic Plan, SSA initiated the IWS/LAN project. As you know, Mr. Chairman, the Strategic Plan paints a broad picture of SSA's future, as well as our means and strategies to achieve our long-range goals. SSA's business approach to providing world-class service while workloads grow relies on business process and information technology improvements, such as IWS/LAN. This technology is key to our business strategy because it provides employees with state-of-the-art tools to serve the public and it opens up exciting new possibilities for doing business with our customers in the future.

This project establishes a national computer network including desktop computer workstations for all SSA and DDS employees supported by appropriate communications and software systems. This technology is critical in taking claims efficiently and providing online service to national 800-number callers. This project also reflects SSA's conviction that employees deserve a professional environment in which they can readily access information enabling them to increase productivity and to provide better service to the public. SSA's strategic goal—to be an employer that values and invests in each employee, relies in part on providing such tools and training needed for high quality performance.

In 1995, at the time Social Security became an independent agency, one of our first undertakings was the implementation and distribution of this new computer equipment. SSA has accomplished what many said could not be done. I am happy to report that we have successfully installed more than 75,000 workstations and 1,742 local area networks in SSA and State DDS offices throughout the country. To achieve this, we installed the new equipment in 75 offices per month, which was a major undertaking, as all installations had to be done on the weekends. I am particularly proud that these installations were accomplished without any disruption to our ability to serve the public.

SSA is currently in the process of acquiring an additional 6,900 workstations and 275 local area networks to complete the installation for all employees. This project is one of the largest information technology initiatives ever undertaken in the Federal government.

The IWS/LAN project provides the enabling infrastructure for many of the technology-based initiatives that SSA is implementing. It provides a standardized platform and architecture that now exists throughout SSA and the DDSs and our hearings and appeals offices, which I described earlier. In addition, the accomplishments of IWS/LAN pave the way for our ability to provide service electronically and exploit emerging technologies to improve service to SSA's customers.

Our redesigned title II system is a major investment that has enabled us to do our job more efficiently. That technology has allowed us to improve the services we

provide, as well as the manner in which we provide those services. When the public comes in to file a claim for Social Security or Supplemental Security Income benefits, their claims are now processed faster and with greater accuracy than ever before. We are able to handle more than 70 million telephone calls per year to our 800 number by using automated responses to our customers, as well as by using technology that allows our employees to quickly locate necessary information. Our streamlined process for reporting W-2s allows us to provide more timely and accurate feedback to our nation's employers. Finally, we are now making use of the Internet to provide our customers with a wide range of SSA services. And, we are in the process of converting our processing centers from paper-bound processing to paperless, electronic processing, which will make these offices more efficient, less costly to operate and will provide better services.

#### AUTOMATION OF DISABILITY PROCESS

In 1992, SSA began an ambitious software development project, the Reengineered Disability System (RDS), to provide an automated disability case processing system. The primary goal of RDS was to improve service to our disability clients, by reducing processing time and providing a framework for more consistent and uniform disability decisions.

Our initial plan was to develop a single system that would support all the SSA components involved in the disability process. That includes our nationwide network of field offices, the 55 State DDSs and our hearings and appeals offices. We developed a prototype system and implemented it in the pilot SSA field offices in Virginia and the Federal DDS in our Baltimore headquarters. While we achieved some success in the pilot, we ran into significant performance problems.

Because of these performance problems, we felt it would be prudent to obtain an independent evaluation of our pilot system. We delayed further pilot implementation and contracted with Booz-Allen and Hamilton to evaluate the RDS process and recommend options for proceeding.

Based on the contractor's recommendations, we are changing the way we will deploy automation to the disability process. Rather than replace all of the existing DDS systems with one central system, we will build on the strengths of the existing software systems in the DDSs, and link them electronically to an automated field office disability system, based on the RDS system we piloted in the Virginia offices. We are now calling this approach eDIB.

RDS was a very large initiative that required a substantial early investment to build the hardware and software infrastructure needed to support the prototype system. From 1992 through 1999, SSA invested a total of \$4.3 billion in information technology investments; we spent a little over \$71 million on this project. Roughly, one half of this \$71 million investment continues to be applicable to the new strategy recommended by the independent review. Included in this is the automated system which will be used in SSA field offices to strengthen the disability application process and enhance its cost effectiveness. The remaining half is the price we have paid to learn a number of valuable lessons in how to manage the risks associated with deploying this type of technology throughout SSA and the 55 DDSs.

Our new strategy will focus on working with the DDSs to build on their systems, providing more flexibility in the process and recognizing differences in case processing among the States. As with our successes with IWS/LAN and Y2K, SSA needs to continue to strive to apply advances in information technology to improve our disability claims process, and to do so in a way that manages the risk inherent in any technology improvements.

Mr. Chairman, let me illustrate the reason why we must automate the current disability claims process. If you were to walk into one of our offices today to file a disability claim, the SSA representative would complete a paper questionnaire to document information about your disability. The form includes doctors' names and addresses, medications you take, tests you have had performed, documentation of your daily activities, and other detailed medical information. Depending on your individual circumstances, the form might need to be supplemented by additional information concerning your vocational history. Once this was completed, we would need to assemble the folder and mail the information to the State DDS.

Compare that with the improvements an automated process would provide us and which will be facilitated by the software I mentioned earlier in my testimony. All of the information needed for the claims application will be entered electronically by the SSA interviewer using the work station and transmitted electronically to the State DDS. We will eliminate the mailing time delays. We will reduce the need to recontact the disability applicant because the system would assure that all ques-

tions are answered and readable. Information technology will give us a quicker, more efficient process and provide much better customer service.

An important facet of the new disability process revolves around our efforts in working with the medical community to use advanced technology to efficiently obtain an exchange of medical evidence. As you know, difficulties in obtaining medical records have a critical impact on our ability to make timely and accurate decisions on disability claims. Our efforts in this area are focused on enabling providers to electronically transmit medical evidence quickly and securely. The ability to receive this evidence electronically will facilitate a number of steps during the disability process resulting in significant customer service improvements.

Technology improvements will also be invaluable as we work to improve the hearings process, which is a key performance indicator of our strategic plan goal to provide customer-responsive, world-class service. Our hearings office improvements initiative relies on enhanced automation and management data collection and analysis. This will facilitate the monitoring and tracking of case processing and development steps; facilitate the transfer of case-related information; help ensure the completeness of case development and analysis; and increase the efficiency of highly variable labor-intensive functions such as scheduling.

SSA and its State partners remain committed to the common goal of providing automation to improve the processing of disability claims. We plan to follow a strategy that will manage the risks involved in this initiative. By making incremental changes, by carefully developing and evaluating our prototypes before they are put into production, and by making modest investments that build on our existing infrastructure, I am confident we will be able to significantly improve the way we manage the disability claims process.

#### SOCIAL SECURITY STATEMENTS

One of SSA's basic responsibilities to the public is to help Americans understand Social Security and its importance to them and their families. As part of our public education efforts, SSA has been issuing earnings and benefit estimate statements to the public since 1988. And, as I mentioned at the beginning of my testimony, our Strategic Plan identifies strengthening public understanding of our Social Security programs as one of our five Agency Strategic goals.

So far, more than 37 million people have requested and received earnings and benefit statements—formerly known as Personal Earnings and Benefit Estimate Statements (PEBES). In amendments to the Social Security Act in 1989 and 1990, Congress provided that SSA was to phase-in issuing PEBES by issuing them to all workers aged 60 or over in FY 1995; in FY 1996 through FY 1999 to individuals who reach age 60 in those years; and annually to all covered workers aged 25 and older beginning in FY 2000. In addition to the PEBES mailing required by law, SSA sent PEBES to increasingly younger individuals in advance of the schedule in the law. SSA sent a PEBES to workers aged 40 and older—about 73 million people—between September 1995 and March 1999.

The statements we will begin to mail in October—the largest customized mailing ever undertaken by the federal government—will be our newly-designed Social Security Statement which, like its PEBES predecessor, provides estimates of Social Security retirement, disability, and survivors benefits that workers and their families could be eligible to receive now and in the future. The automatic mailings will take place at a rate of about half a million Statements per business day, with about 10 million issued each month. Workers can expect to receive their Statement each year about three months before their birthday.

SSA's computer based recordkeeping and information technology improvements will allow us to produce and mail the statements for about 56 cents each. This is a considerable achievement when we consider that, when we began issuing PEBES in 1988, there were private vendors producing their own version of benefit estimate statements for individuals and charging them a fee of \$10 or more.

SSA redesigned the PEBES format and language to make it easier to read and understand. We tested four prototypes with focus groups in three different age groups (ages 25–35, 36–50, and over 50). Additional public input was obtained through a mail survey of 16,000 randomly selected individuals from the same age groups. Focus group and mail survey participants alike overwhelmingly found the redesigned statement an improvement over PEBES.

I am pleased to report that the results of a recent Gallup survey, undertaken at SSA's request, revealed that individuals who had received a statement had a significantly increased basic understanding of Social Security. The survey also found that the individuals responding had an increased understanding of some important basic features of Social Security. This relationship validates the performance measures we

use to track our progress in meeting our "Public Understanding" strategic goal: we track both the increasing number of PEBES we send to the public and the increasing public knowledge about our programs.

The information in the Statement provides workers with an easy way to determine whether their earnings (or self-employment income) are accurately posted on their Social Security record. This is important because the amount of a worker's future benefits will be based on his or her earnings record. The Statement tells how to correct inaccurately posted earnings.

We encourage workers to use the Statement to plan for their financial future. Workers can use the Statement to better plan for their financial needs when they retire, or if they become disabled or die and leave survivors.

#### CONCLUSION

As I said at the beginning, Mr. Chairman, SSA's ability to use technology and make systems improvements will be critical to our success as an Agency, given the workloads we will face. I am proud to report that SSA was one of only two Government agencies to receive an A grade in management of information technology from the Government Performance Project from the Alan K. Campbell Public Affairs Institute of Syracuse University's Maxwell School of Citizenship and Public Affairs.

Use of technology has already enabled SSA to improve significantly the service it provides to the American people, and I would like to cite a few examples to illustrate this point:

- In 1982, it took 6 weeks for a person to receive a Social Security card from SSA. Now it takes 5 days.
- In 1982, it took 39 months to post annual wage reports to workers' earnings records. Now, this task is completed in 6 months.
- In 1982, it took four years to perform annual recomputations for beneficiaries entitled to higher benefits. Now this is done in 6 months.
- In 1982, SSA needed three weeks of computer processing time to calculate annual cost-of-living increases. Now, this done in 24 hours.
- In 1982, it took 15 days to issue an emergency replacement payment. This is done now in 5 days.

I am pleased with these achievements, but I believe that SSA can do better. In time, we believe the investments in automation technology that SSA has made in recent years will be vitally important in enabling SSA to manage the increasing workloads it will experience in coming years.

As we look to the future, access to data will be vitally important to SSA's future plans to improve program integrity. For this purpose, the Administration supports the House-passed bipartisan "Foster Care Independence Act of 1999" (H.R. 1802), which includes provisions for data matches, and I would like to commend the Committee, Mr. Chairman, for your efforts on this bill. H.R. 1802 expands the pool of data available for making SSI eligibility and payment determinations by requiring frequent SSA matches with the Health Care Financing Administration and by facilitating electronic exchanges of information from financial institutions about financial assets owned by SSI applicants and beneficiaries. It is data matches, such as these, that will help SSA continuously guard the integrity of our programs.

Throughout its almost 65-year history, Social Security has made a difference in the lives of Americans, and we have a responsibility to be careful stewards of our programs both now and as we move into the 21st century. As demonstrated in our Agency Strategic Plan, we have ambitious goals, and I am proud of those computer systems achievements which will provide the framework for us to achieve them. I look forward to working closely with the members of this Subcommittee in that spirit on these important endeavors, and would be happy to answer any questions you might have.

Chairman SHAW. Thank you, Commissioner.

Mr. Levin.

Mr. LEVIN. Well, Mr. Chairman, I do not have any glaring questions.



It is a pleasure to hear this testimony, Mr. Apfel, and from your colleagues, and for us to congratulate you on your accomplishments; and we know, knowing you, that you don't rest for 1 minute on your laurels.

Let me ask you, I remember a number of years ago there was discussion at this Subcommittee about what happens when people call in and the delays that were incurred. And this isn't directly germane, perhaps, but all of this technology is to try to make sure that communication with human beings, including dispatch of their checks, but also handling their complaints, all of it goes well. How does it go these days when somebody calls the Social Security Administration? We don't hear very many complaints anymore, so I take it it is better.

Mr. APFEL. It is better, Mr. Levin.

A number of years ago, a number of people, when calling, received a busy signal or were not able to get through. We established formal strategic goals and objectives in a timeline. These service delivery goals are known throughout the organization.

We manage those goals. Our resources are devoted to meet those goals. I think that one of the keys in any large organization is defining, getting agreement on, and then communicating as to what our service delivery goal should be. Thereafter, all of our activities are devoted to managing to meet those goals.

In the area of the 800 number, over 95 percent of callers get in, and clearly we have had a significant improvement in the area over the course of the last 5 years. Technology helps you go to the 800 number office right now, and there sits an IWS/LAN on that person's desk to be able to immediately access for the individual who is calling, their claim, their information, information that they have had in the past.

I would also point out that we now have a new system that is a major technology improvement. When that call comes in, now for the first time, we can pull up what the person has received, in terms of correspondence, in the immediate past.

This is a tremendous improvement. Rather than a person saying, "I got a letter from Social Security" and our people are saying, "Can you read it to me so I can figure out what the problem is?" With the click of a button, we can now access what those letters are, giving our employees tremendous efficiencies.

That is just one example of how technology has helped us in meeting what are going to be continual workload demands in the future with the remarkable staff that we have.

Mr. LEVIN. Last, let me ask you a question on behalf of my 94-year-old mother-in-law. It is about her Social Security checks. She receives these mailings about Y2K, and it frightens her. So you are ready for the year 2000 for January. You have been working with the Federal Reserve Board. I can tell my mother-in-law, I mean this seriously, she will receive her check on time?

Mr. APFEL. Yes. And I think that is a very serious issue. You absolutely can tell her that.

We have been certified as 100-percent compliant through the entire network, from Social Security to the Department of Treasury, through the Federal system. The Federal system is entirely Y2K compliant.

We have also established contingency plans which are really at the leading edge of the Federal level. If there are localized problems, the plan indicates how to work around those problems to assure that people will receive accurate and appropriate services as rapidly as possible.

We are very proud of the fact that we are Y2K OK; and we are, within the week, I hope, sending to the Committee our public education strategy for Y2K, which we think is an important step in this process. We need to communicate to the American public that we are ready for the millennium.

That, I believe, is a very high priority. We can't just figure it out and then sit on our laurels. That is why we need to, one, fix the systems; two, contingency plans; and three, develop a public education strategy for communicating to the public that we are ready. And we have done all of those things, and I believe we are absolutely ready for the new millennium.

Mr. LEVIN. Good going, thanks.

Chairman SHAW. Mr. Portman.

Mr. PORTMAN. Thank you, Mr. Chairman.

Commissioner, thanks for being here. I think SSA deserves to be commended for taking the lead on Y2K.

And I never got straight As. I don't know about the Chairman. But Steve Horn is a tough grader.

But I also think that the notion that Mr. Levin just said about not resting on the laurels is important, and contingency plans are very important.

What happens if there are external factors such as mail service is not in place to be able to deliver the checks? Do you have some alternatives that you are thinking about?

Mr. APFEL. We certainly do.

First of all, the Postal Service is in very good shape for Y2K, and they have their own contingency plans as well. The first step in any localized problem, Mr. Portman, would be to move people to work and to move work to people. That is true for the Postal Service. That would be true for us as well within Social Security.

If there is—even today there can be a problem with a certain mailing address not receiving checks. We have systems in place to work around that problem, to be able to get information and get checks to people as soon as possible. Number one is people to work and work to people.

Number two, if a check has not arrived, say, to a bank, the electronic transaction cannot be transacted with one particular bank someplace, we have established contingency plans where, on that Monday, we would determine with the Treasury Department and the Federal system whether the bank will be in a position within the next 24 to 48 hours to be able to make that transaction.

If that is not possible, we will immediately contact the Treasury to issue a check. That check will be issued through the mail. So that will take 5 days roughly, maybe 7 days, by the time the check is received. But if there is an emergency, if someone said, "I really need this money," they can come into our field office and we will automatically and immediately cut a check for that individual. That will be available.

We also have these localized plans in every one of our field offices, and included in that is a connection to each one of your offices. You will be getting a mailing from me sometime I would hope within the next month with contact names, within every one of our field offices. If you experience a problem, you will know who your office should call, and who will be calling your office if any problem is identified anywhere in your congressional district.

Mr. PORTMAN. There will be some sort of emergency for people who need a check badly. There will be—local offices at their discretion, and they will cut the check?

Mr. APFEL. Absolutely.

Mr. PORTMAN. Let me back up for a second. I don't want to spend a whole bunch of time on this.

Assuming the mail service does not work, literally does not work during that period of time after the 1st, you are saying your contingency would be to get the checks somehow to the workplace. And also on the electronic side we have to assume that that is another area where there is some external vulnerability. And so in terms of electronic transfers or, as you say, transfers with financial institutions, one would have to prepare for that.

Mr. APFEL. This year, given the particular circumstances, we are going to have the actual checks delivered to the Postal Service on the 29th, which is ahead of schedule, to give advance time to the Postal Service.

Mr. PORTMAN. They are in place locally?

Mr. APFEL. We are in very good shape for those.

Mr. PORTMAN. OK. Let me talk for a second about RDS. Unfortunately, this reminds me a lot of the IRS work we did over the last few years. What was the total budget of the RDS process from 1992 on?

Mr. APFEL. From 1992 on, we have expended somewhere in the vicinity of \$70 million. I can give you—

Mr. PORTMAN. That was a budget. Was it budgeted to be \$70 million?

Mr. APFEL. You mean to date?

Mr. PORTMAN. Yes.

Mr. APFEL. Well, each year a decision was made as to the amount needed—there was never a decision in 1992, let's spend \$70 million.

Mr. PORTMAN. Each year since 1992 there has been additional money spent up to \$70 million.

Mr. APFEL. \$70 million to date.

Mr. PORTMAN. And you pulled the plug on the project when, after spending \$70 million?

Mr. APFEL. I think it is important to clarify to "pull the plugs." Clearly, we have changed directions significantly, and we should have. And it was the right thing to do. We—I made the decision last March, in our disability management plan, that we needed to set up a new direction in this area.

To provide the history here, about 2 years ago—

Mr. PORTMAN. Let me just say, Ken, unfortunately, my time is almost up. I guess if you could—maybe others have other questions about this—but I think that the questions I would have when we get them answered, what was budgeted? What was actually spent?

Why did it take us so long to pull the plug? And what did we learn from it?

I would like to know whether the Booz-Allen study is part of this \$71 million, because it seems to me that was a major expense that needed to be included in it. And you say roughly half of the money, the funding that was used, is going to be used in other ways.

Again, at the IRS, we saw that \$3 to \$4 billion of that budget was literally wasted. It wasn't able to be used in terms of the re-engineering of the software and hardware, information technology generally. I think we need some answers on that. And, more importantly, what did we learn from this? The Social Security recipient who is out there is hearing that \$70 million was wasted on something? Should we have had a mechanism in place to monitor this so we knew early on what was going wrong and to be able to pull the plug sooner?

I see my time is up, but if the Chairman will indulge me to some answers of that.

Chairman SHAW. Go ahead.

Mr. APFEL. I think it is appropriate to try to put the whole issue in context.

The project was initially started back in the early nineties. The design was established 2 years ago. The pilot prototype was established.

Now the original RDS model was for a very comprehensive system that would replace every system within our State DDS. So every State would replace their system. One comprehensive system that would be throughout our hearing offices, our field offices, as well as the State DDS partners, that prototype was established 2 years ago.

When I became Commissioner, during the very first week I received a briefing that there were some operational problems at that point in time, so it went live, the pilot, the prototype about 2 years ago. There were some problems that developed. And my Chief Information Officer brought up the need for what I think made sense, a significant analysis of the cost effectiveness of the model and the implications of it.

Really, it was an investment review of the model. We directed the contract within a very short timeline for an independent review of our model, and we received the draft of that report last February. It indicated that it was a very high risk and a very large system with significant risks involved. I made the decision that it made sense to redirect the investment to a much more focused design. Rather than replacing systems within the Disability Determination Systems, to modify those systems to establish an electronic folder in our field offices with applicability to the State computer systems, and with applicability to our hearing offices.

So the differences are incremental rather than a comprehensive prototype. It would be an incremental model with incremental releases, much less investment in the short term and less risk.

We think it is the right model for electronic commerce in the disability area. It is a low-risk strategy. It is building on the \$70 million that was expended, and about half of it is directly applicable to the endeavors that we are involved in to date. That needs to be put in the context of the \$3 to \$4 billion that was spent over that

period of time on information technology. So the RDS activity was a fairly small one in terms of investments, compared to our overall IT budget.

But I believe it was the right decision to redirect away from the comprehensive prototype which does have higher risks, to a more incremental product. And we will be moving forward with modifications, which I think are appropriate. I don't know whether Dean or Kathy would want to add anything to that. But it seems to me we have made the right decision earlier to redefine the scope of the project to assure full cost benefit for every step that we take in this process in the future.

Chairman SHAW. Mr. Doggett.

Mr. DOGGETT. Thank you.

I would like to continue that discussion, because I am sure, as are you, I hate to see \$10 wasted, much less \$70 million. However, many millions of dollars is alleged to have been wasted, and I would like to focus on that number. Is it correct to say that \$71 million has been wasted, or is there some portion of this money that represents hard work costs that has other application?

Mr. APFEL. Well, we would disagree strongly with the notion that \$70 million was wasted. Roughly half of the endeavors are directly applicable to our new endeavors that we are involved with. Now, that is only half. The issue here is that we are dealing with managing risk. Whenever one tries to move forward on new major investments in technology, there is risk involved in any one of those steps.

Indeed, if we look at IWS/LAN, I think that many would have said, many would have been skeptical of the plan that we had for IWS/LAN, to do the rollout as quickly as we did throughout the country. It was a very aggressive schedule. A lot of resources were invested in that area. That worked flawlessly and now is applauded, I believe, throughout the country, as an excellent model of a national rollout, really one of the largest technology changes throughout the country. The success of this rollout was recently outlined in the Letters to the Editor section of the May 3, 1999, "Government Computer News." I would like to submit the letter for the record.

[The information follows:]

**GOVERNMENT COMPUTER NEWS, May 3, 1999, Volume 18, Number 11**

LETTERS TO THE EDITOR

*SSA gets IT done*

Thank you for the article, "LAN project forces agency, vendor to meet in middle" [GCN, March 8, Page 8]. It draws attention to the massive, successful technology transformation that the Social Security Administration is undertaking as part of the Intelligent Workstation/LAN contract.

Your story, like past articles you have run on IWS/LAN, focused on PC pricing. While this is interesting, you're missing the big picture: IWS/LAN is one of the largest, most ambitious information technology modernization efforts ever undertaken in the federal government, and it will have a tremendous impact on SSA's ability to continue providing cost-effective and efficient services to citizens.

In 1995, SSA faced the pending issue of increased beneficiaries, applicants and workload demands caused in part by the future retirement of the baby boom generation.

However, the agency's ability to provide expanded services was limited by outdated information technology and declining staff resources.

The following year, SSA embarked on the IWS/LAN program. It involves the integration of 56,500 PCs running Microsoft Windows NT and 1,742 LANs in state Disability Determination Services offices and 1,300 SSA field offices. Added to that is extensive training for all users, many of whom previously were using dumb terminals.

Today, thanks to a very aggressive schedule that involved the installation of 75 LANs per week, that program is on cost and on track to be completed in mid-May.

All this was accomplished without interrupting the operations of 65,000 SSA employees who every day handle 250,000 phone calls, process 20 million real-time transactions and transfer some 3 billion bytes of data.

The team at SSA has accomplished in three years what many people in government said couldn't be done—an on-budget, on schedule, major IT overhaul that was completed without disrupting services to the citizens.

T.J. MILLER

*Vice president and general manager  
Information Technology Solutions  
Unisys Federal Systems  
McLean, Va.*

In the RDS area, some of that resource will be applicable to our new model, but not all of it. So our estimate is somewhere in the vicinity of half of that \$70 million would be used for this future electronic commerce and our electronic folder that we are going to be establishing.

Mr. DOGGETT. In what year did the RDS Program begin?

Mr. APFEL. The model first was developed in 1992, and the prototype was established 2 years ago this month. Isn't that right, Dean?

Mr. MESTERHARM. Yes.

Mr. APFEL. Two years ago this month. And the problems that started to emerge, dealing both with our concerns of our State partners as well as the actual technical problems in our Federal DDS, started to emerge very quickly at that point in time. And so, basically, by March, within roughly 6 months of the time of the start of the prototype, we did the Booz-Allen study to try to get an independent sense of whether there should be a change.

Again, I wouldn't use the word terminate. I would say the word would be redirected significantly. It is a much less comprehensive model. It is a more workable model. It is one, I believe, that will lead to significant cost-benefit improvements, and that has been shown in the Booz-Allen study. But I must say that it will not be as comprehensive a system, so it won't be able to do as much as our original model. But I think we are biting the right bite of the apple in terms of technology in this area.

Mr. DOGGETT. And when would you anticipate that would be completed, and is it impacted to any degree by the Y2K issues?

Mr. APFEL. It is not impacted at all by the Y2K issues. We are going to be establishing proof of concept right now and then incremental releases, and that will be starting in our field offices. We would expect by the end of 2000 to have one State up and rolling at this point in time, one State and field offices in that State. We will also be doing a cost-benefit analysis at that time on the experience to date.

Mr. DOGGETT. That will be, in essence, a demonstration project in that area.

Mr. APFEL. It is not a demonstration. It is really a proof of concept that through that one State we can do a cost-benefit analysis to determine exactly what the cost-benefit ratios would be for moving forward on a national level. The long-term plan right now is for a national rollout by the year 2004.

But this way is, we think, a much more prudent response, and it gives us incremental steps along the way to be able to determine cost and benefit analysis.

Mr. DOGGETT. This may be more appropriate to do after the next presentation, I am not sure how you are contemplating handling that, but do you have any response to the findings of the General Accounting Office that are presented here this morning?

Mr. APFEL. I think that the General Accounting Office—I looked at their materials briefly, and I don't know whether either of my colleagues would want to comment, but I think they provide a very accurate assessment of where we are on Y2K, where we are on our IWS/LAN, and where we are on the RDS. And our new modifications, which now we call eDIB, electronic Disability Insurance Benefit—we have a new acronym, a new term for you for our redirected disability design. I think that it is a pretty fair assessment of where we are.

And we are proud of what we have done in the technology areas. I think one of the things that has got to be reemphasized is that technology investments are always about managing risk, and change is about managing risk. If we want to expect specific productivity improvements, we have got to be able to invest in a series of activities. Some may not work as originally envisioned.

I think we got the right design for incremental improvements in the disability arena. And if I could say, Mr. Chairman, if we look at the increases in disability that are projected over the course of the next 10 years, given the aging of the baby boom generation, if we are left a decade from now with a paper-based system, we will drown.

We need to continue to invest in technology to handle increasing workloads in the disability arena, just as we have in the retirement and other areas. Given the onset of disability in the fifties and given the aging of the baby boom generation, we do project specific increases in cases. We have got to continue to invest in technology to do this. That may need some changes, and I think the change we made in terms of the RDS model was an absolutely appropriate one, but we have got to keep our eye on the ball, and that ball is to continue to invest in technology to meet emerging needs.

Mr. DOGGETT. Thank you.

Chairman SHAW. Commissioner, to follow up on some of Mr. Doggett's questions early on, focusing on the IWS/LAN installation project, which was I believe \$1 billion—that is with a B—for the first phase, do we have any way of qualifying the benefits from this investment? I understand that a performance review has not been conducted. The General Accounting Office reports that it has not been done. It is required by law. Can you tell us when we might expect such a review?

Mr. APFEL. We conducted a review early on in the implementation of IWS/LAN to determine both cost-benefit analysis as well as workload savings. That was done, I think, on the first 100 offices.

Chairman SHAW. Does the General Accounting Office have that?

Mr. APFEL. I am sure that they do.

Mr. MESTERHARM. Yes.

Mr. APFEL. The issue now is whether, after the fact, it is possible to do a complete cost-benefit analysis of every variable that could have changed. It is hard to do that.

I would like to try to explain this in some detail. Many things changed over the course of the last 3 years, processes changed as well as automation. To try to figure out after the fact, 3 and 4 years after the implementation, how much of the input is due to specifically this activity, is hard.

One of the things we could explore with the General Accounting Office is whether we could get some recommendations from them about how to conduct an after-the-fact investment in these endeavors to be able to factor out how much of it is from the technology and how much of it is from the changes in process that took place over the course of the last 3 and 4 years, actually.

We believe that our original assessment of the first 100 offices provided a very solid justification in cost benefit—

Chairman SHAW. How were these chosen?

Mr. APFEL. I think it is the first 100 offices.

Ms. ADAMS. It was a stratified sample throughout the country so we could take that data and then extrapolate it out to our whole enterprise.

Chairman SHAW. How were they chosen, the first 100 offices? How many offices are there?

Ms. ADAMS. They were chosen to be a representative sample.

Chairman SHAW. Was it a random sample?

Ms. ADAMS. No, it was not random. A lot of discussion and thought went into the choice of the 100 pilot offices.

Mr. APFEL. That is because, again, the way that IWS/LAN was rolled out was not starting slowly in each office. It was going in office by office and over a weekend doing a major installation. The staged rollout over the last 2 and 3 years was not a slow upgrade throughout all of our 1,300 field offices and our hearings offices. It was every weekend tearing apart one particular office, installing a whole new system. So these 100 were some of our first offices that were installed.

Chairman SHAW. Well, you mentioned in your testimony, I believe I am quoting you correctly, "this has been a huge success." And I do acknowledge the law that does require a determination as to the effectiveness. I would hope that you would get with the folks over at the General Accounting Office and set up the parameters of that review in a manner that would be satisfactory to both you and to them and have this completed at an early date. If the law is incorrect in requiring this, then we should change the law, but I doubt if that is the case. I think this type of accountability is needed and is a good thing to have.

Mr. APFEL. We will have conversations with the GAO on how to do that.

Chairman SHAW. Thank you.

Mr. McCreery.



Mr. MCCRERY. Mr. Commissioner, the \$71 million figure that was the cost of RDS, did that include the cost of the Booz-Allen study?

Mr. APFEL. Yes, it did.

Mr. MCCRERY. How much was the Booz-Allen study?

Ms. ADAMS. About \$1 million.

Mr. MCCRERY. How much?

Mr. APFEL. About \$1 million.

Mr. MCCRERY. OK. Can you explain in terms that I can understand, I know you can't know that, but try, the change between the original concept of RDS and what you have gone to now with electronic folders? What did you hope to gain from RDS that you are not going to gain with electronic folders and what are you going to gain from electronic folders?

Mr. APFEL. I will try to do that, Mr. McCrery.

The original model was a fully automated single comprehensive system for all of our organization, both our field offices, our State Disability Determination Services partners, of which there are over 50, needless to say, and our hearing offices, so that there would be one data system that would be used; one system, a very comprehensive model, that would provide the ability ultimately to move information back and forth absolutely readily, as we do with our IWS/LAN and many of our other cases.

That was the original design, and that meant new computer systems in our field structure and replacing computer systems in every one of the 50 States, because we have the State partners.

The Booz-Allen study pointed up that that kind of change, particularly to the State systems, was going to be high risk, potentially very high benefit, but very high risk. The new model is for an electronic folder so there is new automation in our field offices, modifications to the State systems, so that now in our field office a person takes the information with the computer, as opposed to on paper, and the data elements will be changed within the State computer systems to make them consistent.

We still get the information in all three of our pieces, our field offices, our States, and our hearings offices, but we haven't established one comprehensive system. We have an electronic folder of information for the individual, that is the new model, and it is a smaller model. It is a much less comprehensive system change.

But it is an appropriate one, because changing those State systems, given the fact that so many State systems have their own unique systems, would have been a significant hurdle to overcome. We have lost some of our comprehensiveness in terms of the design and the ability to move information, all information across all of our components, but we have gained some improvement. I think this goes really to what we see in many of our other areas. We have got to be able to do an investment and show a payoff immediately, in incremental improvements.

The electronic folder is an incremental improvement. It is—ultimately, I would have preferred—I think everyone would prefer—one comprehensive system, but that is just too big a bite of the apple, and moving in the direction of the electronic folder is an incremental step that can be tested as it goes forward in ways that I think are very productive for the organization.

Mr. MCCREERY. Let me ask—I am still not really clear—are you just saying that the electronic folder means we are going to go from paper to computer? That seems to be your big advance.

Mr. MESTERHARM. Let me try to simplify, if I can.

To talk about the previous strategy that we had, the original strategy was based on one set of software. As we said, we rolled out the IWS/LAN. That means that each individual personal computer out there would have this one piece of software. It would be the same software that would run in every field office. It would run on everybody's desk in the DDS. It would run every place in the OHA. That would give us standardization so that we wouldn't have to worry about supporting different versions. That was the goal that we had.

The size of that system was too large. It made it complex. So instead of focusing on this one big common system, we now are, number one, taking what we already coded for the field office portion of it, we are taking the DDS part out, and we are having a system that is only focused on the field office. That will go in the field office. Rather than building new systems for the DDSs, which already have automation, we are taking the current system that they have, and we are having that system interface with a database, which we are calling an electronic folder.

It is a common storage for information. The field offices will move the disability information to that common storage area. The current DDSs systems will pick up that information off of that storage area and be able to process it.

Where we get savings in both cases is the fact that, number one, currently, it is a paper process that is manual and intensive. We can cut about 20—anywhere from 10 to 20 percent off of a case time in the field office and in the DDSs because we pick that information up and send it over to them. They can save time because we have already picked up the information. They don't have to rekey it again.

We save time in the DDSs. We don't have to redo all of their software. They are going to interface with that database.

OHA will be a similar situation. It will interface with that database. So the new approach is to tackle each section at a time, not redo the DDS code.

Mr. APFEL. If I could add, Mr. Chairman, you walk into one of our hearing offices for a hearing with a very large stack of paper. The first step is to open it up and to start copying some of the information down on a new form. The potential for productivity improvements are significant by being able to have common data elements, so that we don't have individuals recopying down on a third piece of paper what has been in separate pieces of paper in the past.

Is it a dramatic redesign of the process? The answer is no. This electronic folder ultimately will help get larger productivity enhancements by automating the process. This is less of a streamlining process than an automating process. I think that is a fair statement. Still significant improvements—to do the latter is a more comprehensive and higher risk strategy. I think it is where we will be 3 and 4 and 5 years from now, how to take the automated systems and now build in more redesign structure to it.

But, ultimately, it is a saver, but it is not as bold. It is not as high risk a strategy.

Mr. MCCREY. Thank you, Mr. Chairman. I have some other questions, but I will wait until the second round.

Chairman SHAW. Mr. Cardin.

Mr. CARDIN. Thank you, Mr. Chairman.

Just to maybe complete this part on the disability claims process. You were very specific as to what you were able to accomplish on getting a Social Security card out, what you were able to do in getting the COLA calculation. What will my constituents experience as a result of the new disability claims technology? We have had far fewer complaints recently than we did in the past. There is no question that you have made tremendous progress in dealing with constituent contact with SSA.

The disability claim process is still one of the most difficult ones for my constituents. They have difficulty getting determinations, and the appeal process is cumbersome. Once this is implemented, what type of improvement will our people see in the disability claim process?

Mr. APFEL. We view the automation endeavors as one of the keys to improving processing times. In the very near future, we will be unveiling our plan for hearings process improvement. We have already unveiled and are working toward the prototypes on the disability improvements at the front end of the process in the State structures. Inherent in both of those designs are the technology improvements that we are talking about here.

It will mean less time, it will mean, given current resources, a speedup of that process. So that the decreases in backlogs that we have seen will come through this improvement. Part of it will also be through the other management steps that we will be unveiling in the next month or so.

Mr. CARDIN. Let me just use Mr. Portman's analogy for one moment for IRS in a different area, and that is one of the problems we had with the Internal Revenue Service in IT improvements was the inconsistency of Congress in providing support for the administrative budget. This Subcommittee on a bipartisan basis has always supported resources for SSA, administrative resources in order to get your job done and to deal with some of the backlog problems.

We are threatened now by the overall budget that could require reductions in your budget. I just really want you to go on record as to how important it is for us to continue to provide the resources necessary if we are going to be able to hold you accountable to make the type of progress that you expect is reasonable.

Mr. APFEL. Well, I will go on record that our administrative budget is a central part of both our service to the public as well as the program integrity to maintain the confidence of the taxpayers. Our request is for level staffing from 1999 into the year 2000 to hold the line and to utilize technology to help us deal with emerging workloads. We will need investments in the future, there is no doubt about it, within Social Security. The workload increases, the retirement of the baby boom generation, which is a decade away, the increases in disability cases that will come from the aging of the baby boomers will place great strains on us.

It is clear that we will need significant resources in the future to be able to meet our customer service goals, given increased workloads.

I do thank this Subcommittee enormously for the support over the years for your endeavors in keeping a strong Social Security and the support for our automation activities. And we are going to need that support in the future, I believe, if we are going to continue to provide quality service to the American public.

Mr. CARDIN. And last, let me—as we started this hearing on Y2K and the purpose of it, let me also congratulate you for the progress that you have made on information technology generally and particularly Y2K. And I hope that you will express—it has been pretty uniform here in Congress how pleased we are with what SSA has been able to accomplish. I hope that message will get to the employees at SSA, because a lot of times they hear from us in an unfriendly way. I think they should know they have done a very good job, and we appreciate that on the Hill.

Mr. APFEL. Thank you. And I will pass that along, sir.

Chairman SHAW. The Subcommittee will stand in recess. There is one vote on the floor, and then I understand there will be a couple of hours before we get another vote, so we should be able to conclude the hearing.

So we will recess for approximately 15 minutes, and then we will come back and complete the hearing.

[Recess.]

Chairman SHAW. I think we are about ready to wrap this up. Mr. McCrery had some additional questions I believe he wanted to pose to the Commissioner.

Mr. MCCRERY. Thank you, Mr. Chairman.

Mr. Apfel, I am interested in an assessment of productivity gains as a result of all of the expenditures we are making for computerization of your work, this electronic folders project that we are now about to undertake, and I understand that you are estimating this project to cost about \$200 million over the next 10 years.

Mr. APFEL. About 300 million.

Mr. MCCRERY. About \$300 million over the next 10 years, that is a fairly substantial investment in a process that we would hope would allow productivity increases. What gains are you estimating for the taxpayer as a result of these expenditures that we are making?

Mr. APFEL. We specifically wanted that information to justify the expenditure, and that is clearly what a cost-benefit analysis is to do. We talked to Booz-Allen about that, and there was a range—a minimum return of about 1.28 to 1 up to well over 2 to 1 in terms of productivity enhancements.

Now, in the private sector, “a star to steer by” is somewhere in the 2 to 1 range. At the lower end of productivity enhancements, that would be lower than the star to steer by that many in the private sector use, but at the higher end, it will be considerably higher than that.

We can provide for the record the breakout of the various cost-benefit analyses that were done based on various assumptions for productivity enhancements that were included in the Booz-Allen report that I think will make the point here. I believe we will see

from this investment somewhat on the higher end of the scale of productivity enhancements, because it is going to take less time, less time per case in our field offices and in our DDSs, and that is really what the cost-benefit analysis shows for the various options.

As we move forward, we are going to be expending somewhere in the \$10 million range. Over the 2 or 3 years in this endeavor, we will be continuing to do cost-benefit analysis so that we will find 2 years from now what the costs and the benefits are for the endeavor that we have done.

If we find that somehow we are very bottom end, we are down at 1 to 1, then we should be reassessing that model. I think what you are going to find, and I think what we will find 2 years from now when we sit before this Subcommittee, is that the cost-benefit work on the incremental improvements that have been done are going to show a significant payoff.

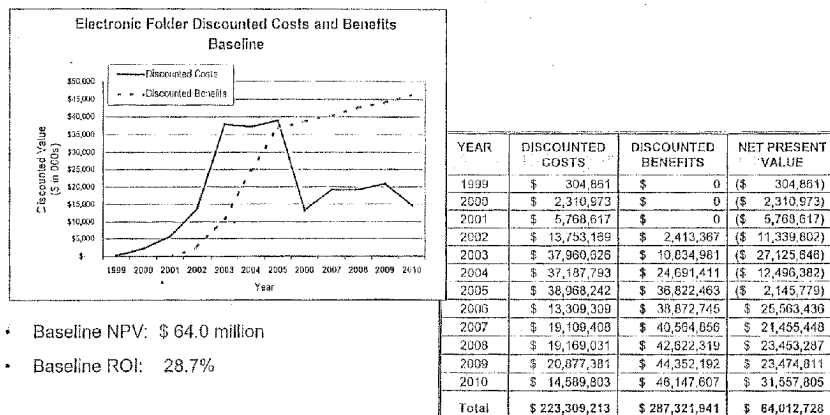
But what I will provide for the record is the various alternative cost-benefit analyses that were included in the Booz-Allen report, which are all positive and I think will not be at the lower end of that range but at the higher end of that range.

[The information follows:]

ADDENDUM 6/16/99

Electronic Folder...Solutions...Cost-Benefit Analysis...

THE FOLLOWING GRAPH AND TABLE PROVIDE THE BASELINE ELECTRONIC FOLDER COST-BENEFIT SUMMARY



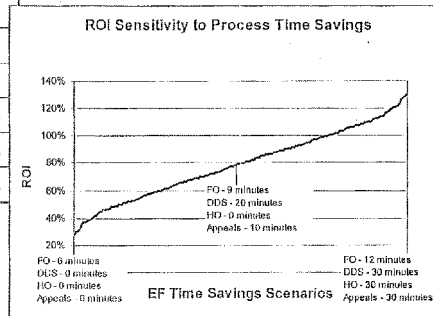
THE ELECTRONIC FOLDER BASELINE SCENARIO DEMONSTRATES POSITIVE FINANCIAL RETURNS. EVEN GREATER BENEFITS ARE POSSIBLE WHEN POTENTIAL PROCESSING TIME SAVINGS ARE FACTORED INTO THE ANALYSIS...

ADDENDUM 6/18/99

Electronic Folder...Solutions...Cost-Benefit Analysis...

ROI SENSITIVITY ANALYSIS RESULTS RANGE FROM THE BASELINE ESTIMATE OF 28.7% UP TO A BEST CASE SCENARIO OF 130.0%

FO Time Saved*	DDS Time Saved*	HO Time Saved*	Appeals Time Saved*	Resulting ROI
6	0	0	0	28.7%
6	0	30	10	50.3%
9	10	20	20	73.4%
9	20	30	20	100.1%
12	30	10	10	113.9%
12	30	30	30	130.0%



THE SENSITIVITY ANALYSIS AND FINANCIAL METRICS CLEARLY SUPPORT FURTHER EXPLORATION OF THE EF CONCEPT

Mr. MCCRERY. Well, thank you.

Mr. Chairman, I hope that this Subcommittee will continue to provide oversight of what is going on with productivity improvements or enhancements. I think it is absolutely necessary that we invest in these technologies to avert an explosion of needs in terms of personnel and time as the Social Security Administration has to cover more and more people in the not-too-distant future.

I am hopeful that we are doing all of this with the thought that in the end we are going to save taxpayer dollars by these early expenditures.

Just one more question on the electronic folders. And just tell me if this has not been determined yet or if you don't know. I am completely understanding of that. But—and I am just curious, do you anticipate that there will be some technology that will be provided that will take a software, say, a floppy disk that comes from the Federal SSA and is converted to software that is usable by the States? Or is it going to be necessary for the State to take the floppy, print it out and then hand input into their own software—into their own? Do you know?

Mr. APFEL. The answer is no. But I would like very much for Dean or Kathy to go through the specifics on that. If we had our original model, it had to be the same exact software.

Mr. McCrery. I understand that.

Mr. APFEL. The idea is to have common elements of information that can flow to the two and which provide changes to the computer system but do not replace their system. But I would like Kathy or Dean to explain it.

Mr. MESTERHARM. If I understand your question correctly, you are talking about the claim information. That claim information will be transmitted over telecommunication wires and they will not have to print anything out. They will be working with that on their computers. So that is not going to be paper-printed out a second time. That information will be moved electronically. It will come up on their screens electronically. They will work with it.

No paper is involved. We are trying to eliminate paper, if that is the question you are asking.

Mr. MCCRERY. Yes, I was just curious to know.

Mr. MESTERHARM. There aren't any floppy disks involved in this. It is all handled electronically. It is submitted from their computer over telephone wires to the other computer, all electronic, no floppy disks or anything else involved.

Mr. MCCRERY. You can't do that now?

Mr. MESTERHARM. No. We can do that for a minimal amount of information that we send back and forth right now. But they still key in some of that information. We are trying to make it all electronic.

Mr. MCCRERY. This will eliminate the need for them to key in?

Mr. MESTERHARM. Yes.

Mr. MCCRERY. OK, great. Thank you.

Chairman SHAW. Just one area I want to cover, and you covered it pretty good on your answer—in your statement and also to answers to other questions. But I want to be a little bit more specifically geared toward an idea that Mr. Manzullo had which I sent to you which you replied to. I wish you would comment on that. This is the question of, as an added caution, of putting the checks out early at the end of this year to avert any possible foul-up in the Y2K problem.

Mr. APFEL. Mr. Chairman, I must tell you, when I first heard about this notion as a possibility, I was intrigued myself about whether to send out early payment checks. And we spent a lot of time looking at the potential benefits. The potential benefit is that this would be a check that would be there early and, therefore, that check would not be potentially affected.

The more we looked into this and the more that we talked about it throughout the government, it became very, very clear to me—I changed my opinion very significantly on this. I no longer think this is anything like the right thing to do. The risks are just too high with such an approach.

I believe John Koskinen has testified on this accordingly and I agree with him fully, that that kind of an action would be interpreted as our inability to be able to deliver service to the American public. And the risks just get too high from that. Given the readiness of the Federal structure, which is, in our case, entirely complete; given the readiness of the banking industry, which John Koskinen has testified is one of the leading areas. I heard, but I haven't had this documented, that Alan Greenspan recently said that money is safer in the year 2000 in the bank than it is if you bring it home and put it under your mattress.

Given the readiness of the banking community, the Postal Service and the Social Security Administration, for Federal transactions, an action of moving that check up I think could be inter-

puted as an inability to be able to get out payments, which I think could produce disastrous results. People might withdraw large amounts of currency beforehand. People may want to rush to eliminate electronic transactions that are automatically provided to the banks.

I think it goes exactly counter to what our public education endeavors are aimed at right now. Our public education plan, which we will be submitting to you and to the American public, is to send the message that we are ready for Y2K. We will identify the audiences that we are looking at, the public, the business community, the banks, where we are ready, what the potential contingencies would be if there are any problems in any localized areas and the vehicles for how we are going to be doing that.

We are going to be doing a mailing this October to every Social Security beneficiary saying that we are Y2K OK. Our goal right now is to move to tell the American public that we are prepared to deal with all eventualities, that we are Y2K OK and that we do have contingency plans if there are other minor problems in different areas.

Sending out those checks early could send a disastrous countermessage that we are not ready. I think it would run counter very much to the entire Federal effort to assure people that appropriate steps have been taken.

So where I was originally intrigued by the notion, I must say I am not now. I believe it is the right thing, to stay with our current system.

Chairman SHAW. Do you do electronic transfers into foreign banks?

Mr. APFEL. Yes, we do.

Chairman SHAW. And what is their readiness?

Mr. APFEL. This is still one of the areas that has potential vulnerabilities. About two-thirds of our foreign checks go electronically, is that right? One-third. This is one of the areas that I know that Mr. Koskinen, John Koskinen, has been doing a lot, working with the international bank arena. But I would like to ask either Dean or probably Kathy to respond on the international banking situation.

Ms. ADAMS. We have 300,000 payments that go outside of the country; 100,000 of them are direct deposited. The other 200,000 are checks. We obviously do know less about the international banking scene than we know about the domestic.

We do send the majority to Canada and Mexico of the direct deposits. There are only a couple of countries that we actually do direct deposit with, and they tend to be the more advanced technology countries, that is why we do it with them, and the ones that tend to be in better shape.

But there is no question that we have less information, obviously, because we don't regulate those banks as we regulate American banks. But Mr. Koskinen has spent a lot of time at the UN. In fact, he just had a meeting, the largest meeting that was ever attended by the UN. There were 170 nations there. And he is working very closely with the foreign scene.

And Bruce McConnell, who used to be over at OMB, is focusing on that full time for John, and they are trying to get as much infor-



mation as they can about the foreign banks. But there potentially would be 100,000 folks that would be affected, and we do have contingency plans to get payments for them if there is an issue.

Chairman SHAW. OK. Thank you. Thank you all very much for being with us.

And, Commissioner, could you have somebody stay behind for the next witness so if any questions come up that they will be able to respond to it?

Mr. APFEL. Yes. Good.

Chairman SHAW. Thank you.

The next witness, from the U.S. General Accounting Office, Joel Willemsen. He is Director of Civil Agencies Informations Systems, Accounting and Information Management Division.

I believe, sir, that you were here during the testimony of the previous witness.

Mr. WILLEMSSEN. Yes.

Chairman SHAW. We have a copy of your full statement, which will be made a part of the record; and you may proceed as you sit.

**STATEMENT OF JOEL C. WILLEMSSEN, DIRECTOR, CIVIL AGENCIES INFORMATION SYSTEMS, ACCOUNTING AND INFORMATION MANAGEMENT DIVISION, U.S. GENERAL ACCOUNTING OFFICE**

Mr. WILLEMSSEN. Thank you, Congressman. Thank you for inviting GAO to testify today; and, as requested, I will briefly summarize our statement.

Achieving Y2K readiness has been SSA's top information technology priority, and the agency continues to make excellent progress in this area. SSA remains a Y2K leader among Federal agencies and has initiated a number of government-wide best practices to help ensure preparedness for the turn of the century.

Among those best practices are development of a framework for business continuity and contingency planning, working with the Department of the Treasury and Federal Reserve to test the delivery of benefit payments, development of a detailed day 1 strategy for the rollover period of late December and early January, and implementation of a change management process to further reduce the risk of Y2K-induced disruptions.

While it has been a leader on Y2K, SSA's job is not done. It must still complete several tasks. These include making sure that all critical data exchanges with other organizations are made compliant. Second, SSA must still complete steps in its contingency plans, including testing of those plans. Third, SSA still has one mission—critical system, used for scanning and converting W-2 forms that it must certify as compliant. And, fourth, SSA must correct a number of errors recently identified using a quality assurance tool.

Next, let me turn to SSA's workstation modernization, an effort that to date has involved the installation of about 70,000 computers and over 1,700 local area networks. Last year, we expressed concern about SSA lacking a process for determining whether this investment was yielding expected improvements in service to the public. Although SSA agreed with the need for such measures, no such reviews of what actual benefits are accruing from the modernization have occurred yet, and this becomes increasing impor-

tant, since SSA now plans to acquire more workstations and networks at additional cost.

And the last information technology initiative that I will touch on is SSA's development of its Reengineered Disability System. As noted earlier, SSA has experienced numerous problems and delays with this particular system, and, in particular, the software for this system. For example, in 1996, we reported on these problems and discussed the 2-year delay that was appearing at that time.

Now, in response to these problems, as noted earlier, SSA has contracted for an independent assessment of the initiative; and based on that assessment and the recommendation that the system be discontinued, SSA has decided to terminate the original strategy after 7 years of effort and, as noted earlier, the reported expenditure of about \$71 million.

SSA now plans to proceed with a revised strategy to address the needs of that determination process. In doing so, we think it is especially important that SSA link the initiative with the other steps SSA is taking to improve its software development capability. Without such a linkage, we think SSA risks another failed initiative; and, therefore, we think it is very important that that linkage occur.

That concludes a summary of my statement, and I will be pleased to address any questions you might have.

[The prepared statement follows:]

**Statement of Joel C. Willemsen, Director, Civil Agencies Information Systems, Accounting and Information Management Division, U.S. General Accounting Office**

Mr. Chairman and Members of the Committee:

We are pleased to be here today to discuss the Social Security Administration's (SSA) progress in implementing key information technology initiatives critical to its ability to effectively serve the public. Achieving Year 2000 (Y2K) readiness is SSA's top information technology priority. Consistent with our prior reports,<sup>1</sup> SSA continues to make excellent progress on Y2K and has taken important steps to implement our recommendations for mitigating risks. Further, it has initiated a number of governmentwide best practices to help ensure its preparedness for the change of century. Nonetheless, SSA's work is not yet complete; certain tasks integral to ensuring its overall readiness for the year 2000 must still be accomplished.

Another major focus of SSA's information technology activities is implementation of its Intelligent Workstation/Local Area Network (IWS/LAN), which SSA expects will provide the agency with the basic automation infrastructure to support redesigned work processes and improve its service delivery. SSA continues to implement IWS/LAN and reports that it has now installed intelligent workstations and LANs in most of the approximately 2,000 SSA and state Disability Determination Service (DDS) sites included in the initiative. However, it has not yet implemented key processes that are essential to measuring the benefits derived from this investment.

The third initiative that I will discuss today is SSA's development of its Reengineered Disability System (RDS). RDS was intended to support SSA's modernized disability claims process and was to be the first major programmatic software application to operate on IWS/LAN. However, SSA experienced numerous problems and delays in developing this software. Based on a contractor's recent assessment of the initiative, SSA has now decided to terminate the original RDS strategy after 7 years of effort and about \$71 million in reported costs. SSA now plans to proceed with a new strategy to address the needs of its disability determination process.

<sup>1</sup> *Social Security Administration: Significant Progress Made in Year 2000 Effort, But Key Risks Remain* (GAO/AIMD-98-6, October 22, 1997); *Year 2000 Computing Crisis: Continuing Risks of Disruption to Social Security, Medicare, and Treasury Programs* (GAO/T-AIMD-98-161, May 7, 1998); and *Year 2000 Computing Crisis: Update on the Readiness of the Social Security Administration* (GAO/T-AIMD-99-90, February 24, 1999).

## YEAR 2000: CONTINUING PROGRESS, BUT CRITICAL TASKS REMAIN

SSA first recognized the potential impact of the Y2K problem in 1989, and in so doing, was able to launch an early response to this challenge. SSA initiated early awareness activities and made significant progress in assessing and renovating mission-critical mainframe software that enables it to provide Social Security benefits and other assistance to the public. Because of the knowledge and experience gained through its Y2K efforts, SSA has been a recognized federal leader in addressing this issue.

Despite its accomplishments, however, our 1997 report on SSA's Y2K program identified, and recommended actions for addressing three key risk areas:<sup>2</sup>

- SSA had not ensured Y2K compliance of mission-critical systems used by the 54 state DDSs that provide vital support in administering SSA's disability programs. Specifically, SSA had not included these DDS systems in its initial assessment of systems that it considered a priority for correction. Without a complete agencywide assessment that included the DDS systems, SSA could not fully evaluate the extent of its Y2K problem or the level of effort that would be required to correct it. We therefore recommended that SSA strengthen its monitoring and oversight of state DDS Y2K activities, expeditiously complete the assessment of mission-critical systems at DDS offices, and discuss the status of DDS Y2K activities in SSA's quarterly reports to the Office of Management and Budget (OMB).

- SSA had not ensured the compliance of its data exchanges with outside sources, such as other federal agencies, state agencies, and private businesses. Unless SSA can ensure that data received from these organizations is Y2K compliant, program benefits and eligibility computations that are derived from the data provided through these exchanges may be compromised and SSA's databases corrupted. Accordingly, we recommended that SSA quickly complete its Y2K compliance coordination with all data exchange partners.

- SSA lacked contingency plans to ensure business continuity in the event of systems failure. Business continuity and contingency plans are essential to ensuring that agencies will have well-defined responses and sufficient time to develop and test alternatives when unpredicted failures occur. At the time of our October 1997 review, SSA officials acknowledged the importance of contingency planning, but had not developed specific plans to address how the agency would continue to support its core business processes if its Y2K conversion activities experienced unforeseen disruptions. We therefore recommended that SSA develop specific contingency plans that articulate clear strategies for ensuring the continuity of core business functions.

SSA agreed with all of our recommendations and efforts to implement them have either been taken or are underway. Regarding state DDSs, SSA enhanced its monitoring and oversight by establishing a full-time project team, designating project managers and coordinators, and requesting biweekly status reports. It also obtained from each DDS a plan identifying the specific milestones, resources, and schedules for completing Y2K conversion tasks. In its most recent (May 1999) quarterly report to OMB, SSA stated that all DDS claims processing software had been renovated, tested, implemented, and certified Y2K compliant by January 31, 1999.

To address data exchanges, SSA identified all of its external data exchanges and coordinated with all of its partners on the schedule and format for making exchanges Y2K compliant. As of June 27, 1999, according to the agency, over 99 percent of SSA's 1,954 reported external data exchanges had been made compliant.

Among SSA's most critical data exchanges are those with the Department of the Treasury's Financial Management Service (FMS) and the Federal Reserve System for the disbursement of Title II (Old Age, Survivors, and Disability Insurance program) and Title XVI (Supplemental Security Income program) benefits checks and direct deposit payments. SSA began working with FMS in March 1998 to ensure the compliance of these exchanges, and reported earlier this year that the joint testing of check payment files and testing from SSA through FMS and the Federal Reserve for direct deposit payments had been successfully completed. Further, SSA stated, it began generating and issuing Title II and Title XVI benefits payments using the Y2K compliant software at SSA and FMS in October 1998.

Regarding its contingency planning, SSA has instituted a number of key elements, in accordance with our business continuity and contingency planning guidance.<sup>3</sup> In addition to developing its overall strategy for Y2K business continuity, SSA has completed local contingency plans to support its core business operations and has received contingency plans for all state DDSs. Also included among its plans is

<sup>2</sup> GAO/AIMD-98-6, October 22, 1997.

<sup>3</sup> *Year 2000 Computing Crisis: Business Continuity and Contingency Planning* (GAO/AIMD-10.1.19, March 1998 [exposure draft], August 1998 [final]).

SSA's Benefits Payment Delivery Y2K Contingency Plan, developed in conjunction with Treasury and the Federal Reserve to ensure the continuation of operations supporting Title II and Title XVI benefits payments.

Another key element of business continuity and contingency planning, as noted in our guide, is the development of a zero-day or day-one risk reduction strategy, and procedures for the period between late December 1999 and early January 2000. SSA, as a recognized leader in addressing Y2K contingency planning issues, has developed such a strategy. For example, the agency plans for select SSA and DDS sites to process late December 1999 data during the first 2 days of January 2000 as a means of testing the accuracy of the systems prior to the start of business on Monday, January 3. Other features of the strategy include implementation of (1) an integrated control center with responsibility for the internal dissemination of critical data and problem management, (2) a timeline detailing the hours during which certain events will occur (such as when workloads will be placed in the queue and backup generators started) during this rollover period, and (3) a personnel strategy and leave policy which includes commitments from key staff to be available during the rollover period. Such a strategy should help SSA manage the risks associated with the actual rollover and better position it to address any disruptions that occur.

SSA has taken other vital steps to help ensure its preparedness for the year 2000. For example, it has used a Y2K test facility to test operating systems, vendor products, and mission-critical systems. SSA's test and certification procedures included (1) baseline testing to establish current-year data for comparison, (2) forward year testing of applications with business and systems dates set in 2000 and beyond, (3) comparisons of aged baseline results with forward year test results, (4) forward date integration testing of entire business functions (i.e., all interrelated applications), and (5) independent reviews of test outputs to certify Y2K compliance.

To ensure the delivery of benefits payments, SSA worked jointly with FMS and the Federal Reserve to test the transfer of approximately 7,500 electronic payments from Treasury to the Richmond, Virginia Federal Reserve Board through the Automated Clearing House network. SSA reported that it began generating and issuing Title II and Title XVI benefits payments using the compliant software at SSA and FMS in October 1998.

#### SSA IMPLEMENTED A Y2K CHANGE MANAGEMENT PROCESS

To further reduce the risk of disruptions, in the fall of 1998 SSA instituted a Y2K change management process. We previously testified that this effort represented a best practice governmentwide that should be adopted by other agencies.<sup>4</sup> SSA's process is comprised of three key components: (1) a quality assurance process, (2) Y2K system re-certifications, and (3) a moratorium on discretionary software modifications.

A key feature of SSA's quality assurance process is its use of a validation tool to assess the quality of its previously renovated mission-critical applications. SSA began piloting the tool in November 1998 and expanded its use full-scale in December. The tool searches application programs to identify any date field or date logic that may fail as a result of any inadvertent modifications.

The second key component of SSA's change management process involves its plans to re-certify previously renovated applications where date errors had been identified and Y2K compliant software was then modified. The re-certification process includes performing forward date testing of the modified software and re-evaluating the software using the quality assurance validation tool. In addition, business function experts perform independent reviews of all test outputs before re-certifying the software's compliance.

Also, SSA plans to enforce a moratorium on discretionary software changes between September 1, 1999, and March 31, 2000. This moratorium is intended to help mitigate the risks associated with changing its certified systems by reducing the number of software modifications made. In those instances in which software changes are necessary—such as when compliant software must be modified due to legal or other agency requirements—SSA plans to re-certify the software's compliance. Examples of software that will be modified include applications impacted by Title II benefits rate increases and Title XVI cost-of-living adjustments that are to take effect in November, and certain cyclical software modifications that are to occur after September.

<sup>4</sup>*Year 2000 Computing Crisis: Readiness Improving, But Much Work Remains to Avoid Major Disruptions* (GAO/T-AIMD-99-50, January 20, 1999).

#### SSA STILL NEEDS TO COMPLETE CRITICAL TASKS TO ENSURE YEAR 2000 READINESS

While SSA has been a Y2K leader, it must still complete several critical tasks to ensure its readiness for the year 2000. These tasks include:

- ensuring the compliance of all external data exchanges,
- completing tasks outlined in its contingency plans,
- certifying the compliance of one remaining mission-critical system,
- completing hardware and software upgrades in the Office of Telecommunications and Systems Operations, and
- correcting date field errors identified through the quality assurance process.

SSA reported as of mid-July that six of its external data exchanges were still in the process of being made Y2K compliant. In each instance, these include files that have been addressed by SSA but which need further action on the part of SSA's business partners to achieve Y2K compliance. For example, SSA transmits one file on cost-of-living adjustments to the Department of Veterans Affairs (VA). While SSA has made the file compliant, VA must still complete its testing in order to receive the file in a Y2K compliant format. VA is scheduled to complete its testing in August. In addition, SSA is waiting to verify the successful transmission of three compliant files from Treasury regarding information on tax refund actions. SSA expects to verify the compliance of the Treasury files during the first week of August. SSA also still needs to verify the successful transmission of two Massachusetts death data files. SSA expects to complete this activity by the end of this week.

Completing tasks in its contingency plans and coordinating with its own staff and its business partners to ensure the timely functioning of its core business operations is likewise critical. This includes coordinating with its benefit delivery partners on contingency actions for ensuring timely benefits payments. For example, SSA plans to assist Treasury in developing alternative disbursement processes for problematic financial institutions. SSA is also now in the process of testing all of its contingency plans, with expected completion in September. In addition, SSA must implement its day-one strategy, comprising actions to be executed during the last days of 1999 and the first few days of 2000.

SSA also has one remaining mission-critical stand-alone system—the Integrated Image-Based Data Capture System—which must still be certified as Y2K compliant. This system is used to scan and convert W-2 forms to electronic format for entry into the Annual Wage Reporting System. According to officials in SSA's Office of Systems, the SSA-developed application software has been renovated, tested, and implemented into production; however, SSA cannot certify the system's compliance until it has completed testing of the system's upgraded commercial off-the-shelf software used for tracking W-2 form data from the point of receipt to image scanning. This testing is not scheduled to conclude until late August.

The installation of software and hardware upgrades in SSA's Office of Telecommunications and Systems Operations must also be completed. For example, SSA must install Internet browser patches for the IWS/LAN software by August.

Finally, SSA must correct a number of date-field errors recently identified using its QA tool. SSA reported that as of July 23, 1999, it had assessed 92 percent (283 of 308) of its mission-critical applications (having a total of about 40 million lines of code),<sup>5</sup> and that it had identified 1,565 date field errors. SSA is in the process of correcting these identified date problems. As of mid-July, it reported that 44 of the 283 applications had been corrected, recertified, and returned to production. SSA plans to correct, recertify, and implement all of its remaining applications by November, when it is scheduled to modify some mission-critical applications to reflect Title II benefit rate increases and Title XVI cost-of-living adjustments.

#### IWS/LAN: INSTALLATIONS CONTINUE BUT CONTRIBUTIONS TO IMPROVED MISSION PERFORMANCE REMAIN UNCLEAR

The second major information technology initiative that I will discuss today is SSA's IWS/LAN modernization effort. SSA expects IWS/LAN to play a critical role by providing the basic automation infrastructure to support redesigned work processes and to improve the availability and timeliness of information. Under this initiative, SSA planned to replace approximately 40,000 "dumb" terminals<sup>6</sup> and other computer equipment used in about 2000 SSA and state DDS sites with an infra-

<sup>5</sup>Thirteen applications were not tested because they are no longer in use (e.g., obsolete, retired, replaced); 10 because they were incompatible with the QA tool; and 1 because it was no longer part of SSA's inventory. One application remained to be tested.

<sup>6</sup>SSA's "dumb" terminals are connected to its mainframe computers through its data network and are controlled by software executed on the mainframes.

structure consisting of networks of intelligent workstations connected to each other and to SSA's mainframe computers.

The resources that SSA plans to invest in acquiring IWS/LAN are enormous. The first phase of the planned project that started in 1996, was to be a 7-year, approximately \$1 billion effort to acquire, install, and maintain 56,500 intelligent workstations and 1,742 local area networks, 2,567 notebook computers, systems furniture, and other peripheral devices.<sup>7</sup>

The basic intelligent workstation that SSA planned to procure included a 100-megahertz Pentium personal computer with 32 megabytes of random access memory and a 1.2-gigabyte hard (fixed) disk drive. We reported in 1998,<sup>8</sup> however, that the IWS/LAN contractor—Unisys Corporation—had raised concerns about the availability of the intelligent workstations being acquired, noting that the 100-megahertz workstations specified in the contract were increasingly difficult to obtain. At that time, SSA's Deputy Commissioner for Systems did not believe it was necessary to upgrade to a faster processor because the 100-megahertz workstation met the agency's needs.

Over the past year, SSA has continued its aggressive implementation of IWS/LAN. The agency reported as of mid-July 1999, that it had completed the installation of 70,518 workstations and 1,742 LANs at 1,565 SSA sites and 177 DDS sites. As the agency has proceeded with the initiative, however, it has revised its requirements several times based on the need for additional workstations. Specifically, between June 1998 and April 1999, SSA modified its contract with the Unisys Corporation three times to purchase additional workstations and related hardware. These modifications increased from 56,500 to 70,624, the total number of intelligent workstations acquired under the Unisys contract.<sup>9</sup> In addition, because Unisys faced difficulty in obtaining the 100-megahertz workstations specified in the initial contract, the additional workstations acquired through the modifications were configured with processor speeds ranging from 266 megahertz to 350 megahertz.

According to SSA officials overseeing the initiative, SSA's initial estimates of its IWS/LAN requirements had not fully considered the needs of all SSA and state DDS sites. As a result, additional workstations were necessary to (1) ensure Y2K hardware compliance at all DDS sites, (2) complete installations in some of SSA's larger sites, and (3) support training needs. SSA reported that the contract modifications cost about \$32 million and that it had completed the installations of all but 106 workstations acquired via the modifications by July 11, 1999.<sup>10</sup>

Beyond these modifications, however, SSA has continued to increase its requirements and is currently in the process of acquiring additional workstations to support the national IWS/LAN initiative. In particular, SSA's Office of Systems concluded during fiscal year 1999 that the workstations acquired via the Unisys contract and its subsequent modifications were not sufficient to fulfill the IWS/LAN requirements of all SSA and DDS sites. As a result, the Chief Information Officer (CIO), in November 1998, approved a request for a \$45 million, 5-year follow-on contract to acquire, install, and maintain at least 6,900 additional workstations and about 275 additional LANs.

According to a Systems official, the intelligent workstation that SSA has specified for the follow-on contract is, at a minimum, a 333-megahertz Pentium II processor with 64 megabytes of random access memory and a 4-gigabyte hard (fixed) disk drive. SSA is currently evaluating vendors' proposals and expects to award the contract by the end of July.

Although the CIO approved the Unisys contract modifications and the follow-on contract, SSA's Deputy Commissioner for Finance, Assessment and Management had previously expressed concerns about SSA's need for the additional workstations and their expected benefits. In particular, in letters to the CIO in November 1998 and April 1999, the Deputy Commissioner recommended that the CIO approve the additional workstations from Unisys and the follow-on contract award on the condition that SSA would, respectively, (1) reassess the total number of work year savings for IWS/LAN and (2) reconcile the number of workstations against staffing levels. The CIO agreed to these conditions and requested that relevant agency compo-

<sup>7</sup>The national IWS/LAN initiative consisted of two phases. During phase I, SSA planned to acquire workstations, LANs, notebook computers, systems furniture, and other peripheral devices as the basic, standardized infrastructure to which additional applications and functionality can later be added. Phase II was intended to build upon the IWS/LAN infrastructure provided through the phase I effort.

<sup>8</sup>*Social Security Administration: Technical and Performance Challenges Threaten Progress of Modernization* (GAO/AIMD-98-136, June 19, 1998).

<sup>9</sup>SSA also used another procurement vehicle to procure 1,767 additional workstations that are also part of the IWS/LAN architecture.

<sup>10</sup>According to SSA, the remaining workstations are to be installed by October 1999.

nents determine the reasons for the additional workstations and identify the benefits expected to be achieved from them. Although this effort has been ongoing for about 8 months, as of July 22, the study had not been finalized.

#### IWS/LAN'S ACTUAL CONTRIBUTION TO IMPROVED PRODUCTIVITY AND MISSION PERFORMANCE REMAINS UNCLEAR

Last June we expressed concern that SSA lacked target goals and a defined process for measuring IWS/LAN performance—essential to determining whether its investment in IWS/LAN was yielding expected improvements in service to the public.<sup>11</sup> According to the Clinger-Cohen Act and OMB guidance, effective technology investment decision-making requires that processes be implemented and data collected to ensure that (1) project proposals are funded on the basis of management evaluations of costs, risks, and expected benefits to mission performance and (2) once funded, projects are controlled by examining costs, the development schedule, and actual versus expected results. We therefore recommended that SSA establish a formal oversight process for measuring the actual performance of IWS/LAN, including identifying the impact that each phase of this initiative has on mission performance and conducting post-implementation reviews of the project.

Although SSA agreed with the need for performance goals and measures, its Information Technology Systems Review Staff had neither completed nor established plans for performing in-process reviews of IWS/LAN to (1) compare the estimated cost levels to actual cost data, (2) compare the estimated and actual schedules, (3) compare expected and actual benefits realized, and (4) assess risks. In addition, while the Clinger-Cohen Act and OMB guidelines call for post-implementation evaluations to determine the actual project cost, benefits, risks, and returns, SSA has not scheduled a post-implementation review to validate the IWS/LAN phase I projected savings and to apply lessons learned to make other information technology investment decisions. According to the Director of the Information Technology Systems Review Staff, the agency has no plans to perform either in-process or post-implementation reviews unless problems are identified that warrant such an effort.

As expressed in our earlier report, it is essential that SSA conduct in-process and post-implementation reviews for the IWS/LAN initiative. Since 1994, we have expressed concerns regarding SSA's need to measure the actual benefits achieved from its implementation.<sup>12</sup> Moreover, as the agency continues to expand IWS/LAN via its follow-on workstation acquisitions, it is critical for the agency to know how well it has achieved the savings projected in its initial assessments supporting this initiative. Without such reviews, the agency will be unable to make informed decisions concerning (1) whether it should continue, modify, or terminate its investment in a particular initiative, or (2) how it can improve and refine its information technology investment decision-making process.

#### SSA WILL NEED TO CONTINUE TO ADDRESS DDS NETWORK MANAGEMENT CONCERNS

Our 1998 report also noted concerns among state DDSs about the loss of network management and control over IWS/LAN operations in their offices and dissatisfaction with the service and technical support received from the IWS/LAN contractor.<sup>13</sup> Accordingly, we recommended that SSA work closely with the DDSs to identify and resolve the network management concerns.

SSA has worked with the DDSs to address these issues. For example, it is providing additional servers to give the DDSs certain administrative rights capabilities, such as access to specific login scripts and full control over DDS applications. SSA has also worked with the DDSs to streamline the maintenance process and establish agreements that would allow the DDSs to perform their own IWS/LAN maintenance. Under such agreements, according to SSA, states could rely on their in-house technical staff—rather than the services of the IWS/LAN contractor, Unisys Corporation—to address maintenance problems. At the conclusion of our review, SSA had entered into a maintenance agreement with one state DDS—Wisconsin—and was considering the requests of four other DDSs.

Other issues also continue to concern the DDSs. For example, representatives of the National Council of Disability Determination Directors, which represents the state DDSs, stated that they remain concerned about SSA's attempts to implement a standard print solution. In addition, they stated that SSA has not ensured that the workstations implemented adhere to a standard configuration that provides all

<sup>11</sup> GAO/AIMD-98-136, June 19, 1998.

<sup>12</sup> *Social Security Administration: Risks Associated With Information Technology Investment Continue* (GAO/AIMD-94-143, September 19, 1994).

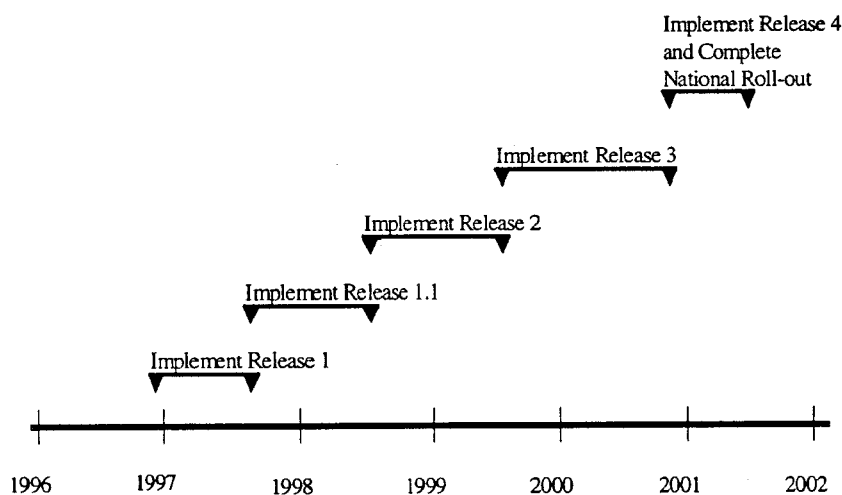
<sup>13</sup> GAO/AIMD-98-136, June 19, 1998.

DDS system administrators with the same rights. SSA has acknowledged these issues and plans to work with the states to address them.

#### RDS: DEVELOPMENT PROBLEMS HAVE LED SSA TO DISCONTINUE THE INITIATIVE

SSA's work toward developing RDS has been ongoing for many years. The initiative began in 1992 as the Modernized Disability System and was redesignated as RDS in 1994 to coincide with the agency's efforts to reengineer the disability claims process. As shown in Figure 1, SSA had planned to implement the RDS software starting November 1996 and to complete the national roll-out by May 2001.

Figure 1: Planned RDS Roll-out Schedule



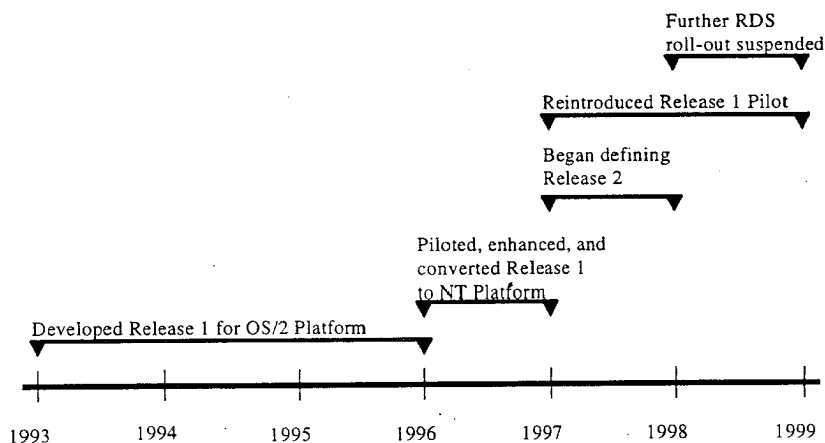
Source: SSA.

When completed, RDS was to be the first major programmatic software application to operate on SSA's IWS/LAN infrastructure and be part of the enabling platform for SSA's modernized disability claims process. Specifically, RDS was to automate the Title II and Title XVI disability claims processes—from the initial claims-taking in the field office to the gathering and evaluation of medical evidence in the state DDSs, to payment execution in the field office or processing center, and include the handling of appeals in hearing offices. SSA anticipated that this automation would contribute to increased productivity, decreased disability claims processing times, and more consistent and uniform disability decisions. However, after approximately 7 years and more than \$71 million<sup>14</sup> reportedly spent on the initiative, SSA has not succeeded in developing RDS and no longer plans to continue the effort.

As Figure 2 shows, between 1993 and 1999, SSA took various steps toward developing the RDS software.

<sup>14</sup>The reported costs were for RDS software design and development, pilot tests, and contractor support.



Figure 2: Actual RDS Roll-out Schedule

Source: SSA.

However, even in its earliest stages, this effort proved problematic and was plagued with delays. For example, in September 1996, we reported that software development problems had delayed the scheduled implementation of RDS by more than 2 years.<sup>15</sup> An assessment of the development effort revealed a number of factors as having contributed to that delay, including (1) using programmers with insufficient experience, (2) using software development tools that did not perform effectively, and (3) establishing initial software development schedules that were too optimistic.

SSA proceeded with the initiative, nonetheless, and in August 1997, began pilot testing the first release of the RDS software in its Alexandria, Virginia field office and the federal DDS<sup>16</sup> for the specific purposes of (1) assessing the performance, cost, and benefits of the software and (2) determining IWS/LAN phase II equipment requirements. However, as we previously reported, SSA encountered performance problems during the pilot tests.<sup>17</sup> For example, Systems officials stated that, using RDS, the reported productivity of claims representatives in the SSA field office dropped due to the system's slow response time. Specifically, the officials stated that before the installation of RDS, each field office claims representative processed approximately 5 case interviews per day. After RDS was installed, each claims representative could process only about 3 cases per day.

In response to the RDS performance problems, SSA delayed its plans for expanding the pilot to other offices and in March 1998, contracted with Booz-Allen and Hamilton to independently evaluate and recommend options for proceeding with the initiative. According to the statement of work, Booz-Allen and Hamilton was tasked to provide SSA with a comparative cost, benefit, risk, and schedule assessment for RDS, and to propose alternative strategies for achieving its underlying objectives. The contractor was originally scheduled to deliver its report to SSA in September 1998, at which time SSA planned to select an option for proceeding to achieve objectives intended for the initiative. However, SSA later extended this milestone, with the draft report being delivered in February 1999. The agency subsequently required the contractor to address additional comments and concerns put forth by SSA, resulting in additional delays. SSA provided the report to us on July 26.

According to the Booz-Allen and Hamilton report, the RDS software had defects that would diminish the current case-processing rate at DDS sites. In addition, SSA had not been timely in addressing the software defects. For example, 90 software

<sup>15</sup> *Social Security Administration: Effective Leadership Needed to Meet Daunting Challenges* (GAO/HEHS-96-196, September 12, 1996).

<sup>16</sup> The federal DDS provides back-up services to state DDSs when the state offices cannot process their workloads and serves as a model office for testing new technologies and work processes.

<sup>17</sup> GAO/AIMD-98-136, June 19, 1998.

problems identified by SSA staff remained unresolved after more than 120 days. As a result, the Booz-Allen and Hamilton report recommended that SSA discontinue the RDS initiative and focus on an alternative solution involving the use of an electronic folder to replace the paper-based case folder in the disability determination process. Further, to reduce development risks, the contractor recommended that the electronic folder project be segmented into manageable sections.

#### SSA PLANS TO LAUNCH A NEW INITIATIVE

Based on the assessment it received from Booz-Allen and Hamilton, SSA has discontinued the development of RDS and has begun to pursue a new strategy for addressing the needs of its disability determination process. According to the RDS project manager, the strategy that SSA is now considering will be multi-faceted, incorporating three components: (1) an electronic disability intake process—which will include a subset of the existing RDS software, (2) the existing DDS claims process, and (3) a new system for the Office of Hearings and Appeals. In addition, we were told the strategy will rely on the use of an electronic folder to transmit data from one processing location to another. The electronic folder is to be a data repository, storing documents that are keyed-in, scanned, or faxed, and will essentially replace the current process of moving a paper folder from one location to another. SSA began pilot testing its new strategy on July 26.

However, as SSA is beginning to move forward with this new initiative, it needs to take advantage of opportunities to apply improved software development processes. In January 1998, we reported that SSA had begun taking steps to improve its software development capability.<sup>18</sup> Significant actions that SSA initiated include (1) launching a formal software process improvement program, (2) acquiring assistance from a nationally recognized research and development center in assessing its strengths and weaknesses and in assisting with improvements,<sup>19</sup> and (3) establishing management groups to oversee software process improvement activities. SSA has developed and is currently applying the improved software development processes to 11 projects.

Given the failure of RDS, it is imperative that any future software initiatives adhere to the improved processes and methods. Without such linkage, SSA again risks spending millions on a project that will not succeed. On July 27, SSA officials told us that the new post-RDS initiative will be linked to the agency's software development improvement efforts.

In summary, SSA has encountered mixed success in implementing its key information technology initiatives. The agency has clearly been a leader on Y2K and has demonstrated a commitment to addressing the challenges of the century date change. Further, the agency has worked aggressively to implement IWS/LAN as its basic automation infrastructure. However, the benefits of the IWS/LAN investment remain uncertain because SSA has not yet assessed its actual contribution to improved mission performance. In addition, after years of problems, SSA discontinued RDS, which will delay expected improvements in the processing of disability claims. To avoid repeating past mistakes on its future information technology efforts, SSA will need to, at a minimum, apply disciplined information technology investment management practices and adhere to improved software development processes.

Mr. Chairman, this concludes my statement. I would be happy to respond to any questions that you or other members of the Subcommittee may have at this time.

#### CONTACT AND ACKNOWLEDGEMENTS

For information about this testimony, please contact Joel Willemsen at (202) 512-6253. Individuals making key contributions to this testimony included Michael A. Alexander, Yvette R. Banks, Nabajyoti Barkakati, Valerie C. Melvin, Kenneth A. Johnson, and Sonal Vashi.

Chairman SHAW. Have you discussed that linkage with SSA?

Mr. WILLEMSSEN. Yes, we have. We have discussed it with SSA this week. And I was informed 2 days ago that SSA now plans to make that linkage, and the projects that they have underway in

<sup>18</sup>*Social Security Administration: Software Development Process Improvements Started But Work Remains* (GAO/AIMD-98-39, January 28, 1998).

<sup>19</sup>The Software Engineering Institute at Carnegie Mellon University, in Pittsburgh, Pennsylvania.

their software improvement initiatives are planned to tie in with the new redesign system.

Chairman SHAW. In your review, I know that the Commissioner said, and I think I am quoting him exactly, we have been certified as 100-percent compliant through the entire system. Do you agree with that statement?

Mr. WILLEMSSEN. In terms of the software that SSA itself has developed, that would be accurate. However, we are aware that one system, which includes some commercial off-the-shelf software, has not been certified as compliant and is planned to be certified later this summer or early fall.

Chairman SHAW. Where does that come into play?

Mr. WILLEMSSEN. That involves scanning in W-2 forms, so it is not an unimportant system, and it is deemed mission critical, but it is something outside of SSA's direct control. Since they didn't develop the software, they have to rely on a vendor to provide an upgrade.

Chairman SHAW. That is with the IRS, isn't it?

Mr. WILLEMSSEN. Yes, that is information that then will be put in the earnings records.

Chairman SHAW. That is completely on the side of receipts rather than disbursements?

Mr. WILLEMSSEN. I believe so, yes, Mr. Chairman.

Chairman SHAW. Mr. McCrery.

Mr. MCCRERY. Mr. Willemsen, I understand that Social Security Administration had planned to procure 100 megahertz pentium workstations? Are you familiar with that?

Mr. WILLEMSSEN. Yes, sir, I am.

Mr. MCCRERY. Is that still the plan?

Mr. WILLEMSSEN. No, sir. At this point, they have gone to higher speed, up to the 350 range. That was what SSA was doing up until the last year or so. They worked out some contractual arrangements with the contractor UNISYS and eventually revised that. That was an issue in the past; it is not a current issue in terms of what they are currently procuring. It may turn out to be an issue from the standpoint of those machines being out in offices which are at that speed.

Mr. MCCRERY. You say they worked out some contractual arrangements with UNISYS?

Mr. WILLEMSSEN. Yes.

Mr. MCCRERY. Can you describe those?

Mr. WILLEMSSEN. Yes. What happened is UNISYS, as you might expect, was finding it increasingly difficult to locate any 100 megahertz anywhere and came to SSA and said we want—we need to redo the contract a little bit, because we can't find these 100 megahertz. I think, to SSA's credit, they didn't just, say, OK let's modify it. Because one thing to keep in mind is the kind of cost for that machine. I think in the third year of the contract it was a little over \$300 a machine. So I think SSA in that negotiation wanted to make sure that there was some cost tradeoff by going with a higher megahertz rating.

Mr. MCCRERY. Yeah. With as many computers as the Social Security Administration has to have, it seems to me we would have quite a few companies out there really wanting to do business with

Social Security Administration. And with the advancement in technology that we are experiencing these days, do we have a contract now that provides for upgrading every so often?

Mr. WILLEMSSEN. One of the issues that we have discussed with SSA is looking at periodic refreshment clauses so that you don't have to go in and modify, but it is done in more of a standardized fashion. As our hardware capability gradually escalates, the procurement system allows for that.

Mr. MCCRERY. Do we have in the Federal Government some kind of a standard procedure for evaluating these contracts? Does OMB get involved?

Mr. WILLEMSSEN. GSA runs a schedule system where it has already worked out the contractual arrangements with various vendors; and Federal agencies then can use that schedule for standard buys. I don't believe this was the situation with IWS/LAN. But I think this was bit more of a customized situation, so that SSA contracted directly with UNISYS. But I can follow up and check on that.

Mr. MCCRERY. That is right?

Ms. ADAMS. Yes.

Mr. MCCRERY. All right. Thanks very much.

Thank you, Mr. Chairman.

Chairman SHAW. One area that I would like to touch on. Regarding the SSA attempts to develop the RDS, does SSA have the right skills and training to plan for and develop the future systems? Should they be giving some thought to contracting out or do they have the skills in-house?

Mr. WILLEMSSEN. I think there is some level of concern about whether they would have the skills to develop the software for this environment, and that is why it is especially important to tie this initiative in with those software improvement efforts that I had mentioned earlier. As SSA embarks on this new strategy and the new software, they should take those process improvements and collate them within the effort, so that they do not repeat the mistakes with the initial redesign effort.

So I think there is some question about the capability. I think SSA acknowledges that and is willing to try and improve it.

One thing I would point out, also, though is if SSA decided to contract out the development, you also need the capability to manage the contractor. So it is not as if you are just handing it off. You still have to have some capability in-house to know what that contractor is doing.

Chairman SHAW. What is the pay scale of people who are charged with that responsibility at SSA compared to what it is in the private sector?

Mr. WILLEMSSEN. I don't have precise figures, but somewhat lower. But, on the other hand, there is a bit more security involved. My experience in the private sector with programmers is movement is a little bit more frequent. So I think there are tradeoffs as in anything.

Chairman SHAW. Thank you.

Jim, do you have anything else?

Mr. MCCRERY. No, that is it.

Chairman SHAW. Thank you, sir.

Mr. WILLEMSSEN. Thank you, Mr. Chairman.

Chairman SHAW. I think I mispronounced your name. I think it is Willemsen.

Mr. WILLEMSSEN. Absolutely correct.

Chairman SHAW. OK.

Mr. WILLEMSSEN. Thanks.

Chairman SHAW. I bet you are called Mr. Williamson a lot—Willemsen.

Thank you.

Thank you all for being here.

This hearing is adjourned.

[Whereupon, at 12 noon, the hearing was adjourned.]

