AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

HEARING ON SBA COMPUTERIZED LOAN MONITORING SYSTEM: A PROGRESS REPORT

HEARING

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT PROGRAMS AND OVERSIGHT

OF THE

COMMITTEE ON SMALL BUSINESS
HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

WASHINGTON, DC, FEBRUARY 29, 2000

Serial No. 106–44

Printed for the use of the Committee on Small Business

U.S. GOVERNMENT PRINTING OFFICE
65–506 WASHINGTON : 2000

COMMITTEE ON SMALL BUSINESS

JAMES M. TALENT, Missouri, *Chairman*

LARRY COMBEST, Texas
JOEL HEFLEY, Colorado
DONALD A. MANZULLO, Illinois
ROSCOE G. BARTLETT, Maryland
FRANK A. LoBIONDO, New Jersey
SUE W. KELLY, New York
STEVEN J. CHABOT, Ohio
PHIL ENGLISH, Pennsylvania
DAVID M. McINTOSH, Indiana
RICK HILL, Montana
JOSEPH R. PITTS, Pennsylvania
JOHN E. SWEENEY, New York
PATRICK J. TOOMEY, Pennsylvania
JIM DeMINT, South Carolina
EDWARD PEASE, Indiana
JOHN THUNE, South Dakota
MARY BONO, California

NYDIA M. VELAZQUEZ, New York
JUANITA MILLENDER-McDONALD, California
DANNY K. DAVIS, Illinois
CAROLYN McCARTHY, New York
BILL PASCRELL, New Jersey
RUBEN HINOJOSA, Texas
DONNA M. CHRISTIAN-CHRISTENSEN, Virgin Islands
ROBERT A. BRADY, Pennsylvania
TOM UDALL, New Mexico
DENNIS MOORE, Kansas
STEPHANIE TUBBS JONES, Ohio
CHARLES A. GONZALEZ, Texas
DAVID D. PHELPS, Illinois
GRACE F. NAPOLITANO, California
BRIAN BAIRD, Washington
MARK UDALL, Colorado
SHELLEY BERKLEY, Nevada

HARRY KATRICHIS, *Chief Counsel*
MICHAEL DAY, *Minority Staff Director*

SUBCOMMITTEE ON GOVERNMENT PROGRAMS AND OVERSIGHT

ROSCOE G. BARTLETT, Maryland, *Chairman*

MARY BONO, California
PATRICK J. TOOMEY, Pennsylvania
RICK HILL, Montana

DANNY K. DAVIS, Illinois
RUBEN HINOJOSA, Texas
CHARLES A. GONZALEZ, Texas

NELSON CROWTHER, *Counsel*

CONTENTS

	Page
Hearing held on February 29, 2000	1

WITNESSES

Hochberg, Fred P., Deputy Administrator, U.S. Small Business Administration	3
Wilkinson, Anthony R., President & CEO, the National Association of Guaranteed Lenders, Inc	8
Willemssen, Joel C., Director, Civil Agencies Information Systems, Accounting and Information Management Division	10

APPENDIX

Opening statement:	
Bartlett, Hon. Roscoe	27
Prepared statements:	
Hochberg, Fred P	30
Wilkinson, Anthony R	55
Willemssen, Joel C	59

HEARING ON SBA COMPUTERIZED LOAN MONITORING SYSTEM: A PROGRESS REPORT

TUESDAY, FEBRUARY 29, 2000

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON GOVERNMENT PROGRAMS AND OVERSIGHT, COMMITTEE ON SMALL BUSINESS,

Washington, DC.

The subcommittee met, pursuant to call, at 10:00 a.m., in Room 2360, Rayburn House Office Building, Hon. Roscoe Bartlett [chairman of the subcommittee] presiding.

Chairman BARTLETT. Good morning. Let me convene the Subcommittee on Government Programs and Oversight of the House Committee on Small Business.

Before I begin, let me note that we are this morning nationwide live on the Net, so if you would please speak into your microphone so that the system can pick it up clearly.

Good morning and welcome to this hearing of the Subcommittee on Government Programs and Oversight of the Committee on Small Business. A special welcome to those who have come some distance to participate and to attend this meeting.

Today we will examine a matter that is of great importance to the taxpayers who expect the 7(a) government guaranteed loan program to be well managed and remain solvent. The hearing is important to Congress in its oversight role and to the U.S. General Accounting Office which is responsible through the audit function to provide accurate information as to the financial condition of federal government programs. And this hearing should be of importance to the Small Business Administration known here in Washington as "SBA" the federal agency that is responsible for the day-to-day direction of the 7(a) loan program.

Section 233 of the Small Business Reauthorization Act of 1997 (Public Law 105–135) requires that SBA complete eight mandated planning actions before the agency obligates or expends any funds for the development and implementation of the proposed new, automated 7(a) loan monitoring system. It would seem only a matter of common sense that the planning phase should be completed before an agency makes major software and hardware purchases for a new computer system.

The proposed new automated loan monitoring system for the 7(a) loan program was the subject of a prior hearing of this Subcommittee held on July 16, 1998. We were encouraged by testimony at that hearing that the Small Business Administration had a project plan, but none of the eight planning steps had been completed.

We in Congress support the Administrator's initiative in relying more on the private sector in the 7(a) loan program. We support SBA's turning over to hometown bankers the decision to originate loans and the responsibility for servicing and liquidating loans. Certainly the local banker has more knowledge of the lender and his or her credit worthiness than bureaucrats located some distance from the community in which the loan is made.

Also, there is a broad-based support in Congress for the Administrator's efforts to modernize SBA's systems and outlook. There is also broad-based support for the Administrator's goal for the 7(a) loan program that is, to get SBA out of the loan application approval business altogether and to assume the role of overseer of the lending institutions.

This hearing will focus on the progress SBA has made, since the July 16, 1998 hearing, in performing and completing the planning needed to serve as the basis for funding the development and implementation of the 7(a) loan program computerized loan monitoring system including the eight planning steps required by the Act.

At this hearing today, we would appreciate your assessment of (1) whether any planning has been completed as of today, (2) the management decisions made as a result of that planning, (3) the planning remaining to be completed, and finally (4) the management decisions remaining to be made. Further, we would like to know the extent to which SBA has involved the lenders in the planning process. Lastly, does the planning for the system include maximizing opportunities to reduce needless paperwork, regulatory burden and costs borne by the borrowers, lenders and SBA?

It would be unacceptable for SBA to ignore the law and the will of Congress expressed in Section 233 of the 1997 Small Business Reauthorization Act. It would be unacceptable for SBA to bypass accepted system development standards and essential planning steps. No successful business could omit prudent planning. It is incumbent upon Congress and the U.S. General Accounting Office to see that a federal agency does not engage in wasteful, willy-nilly project management.

In a nutshell, the purpose of this hearing is to hold SBA's feet to the fire to make sure that they complete the eight planning steps required by law before the agency spends any taxpayers' money to buy software or hardware for a new automated computer system for monitoring its 7(a) loan portfolio.

Again thank you all for participating in this hearing. And thank you in the audience for attending this hearing.

And we are pleased today to be joined by Mr. Danny Davis, Ranking Democrat on our subcommittee, and would now turn to him for any opening remarks that he would care to make.

[Mr. Bartlett's statement may be found in appendix.]

Mr. DAVIS. Thank you very much, Mr. Chairman, and first of all let me commend you for calling this hearing today to review the progress of the Small Business Administration's Automated Loan Monitoring Program.

As we all know, Section 233 of the 1997 SBA Reauthorization Act, PL–105–135, mandated that SBA perform the necessary planning to implement the computerized loan monitoring system. Mod-

ernization of SBA's loan monitoring system is critical to the survival of our small businesses, as it will help expedite loans in a more efficient and timely manner. This is most important to those programs which embody 7(a) programs and disaster assistance.

As a member of this committee, I have worked tirelessly to see that all members of this country receive a fair and equitable treatment from the Small Business Administration regarding access to capital. I have also seen the same commitment from the Small Business Administration. First, completing the modernization of SBA's Loan Monitoring Program will enable everyone here to evaluate the progress made by the Small Business Administration concerning access to capital. Therefore, the full implementation of the SBA plan is critical to the success of the SBA and small businesses who need the services that it provides.

I have complete confidence that the Small Business Administration and this committee will work together to that end. It is certainly encouraging to see the progress that has been made. It is encouraging to know that the Small Business Administration is dealing with what I consider to be, especially in much of the community that I represent, access to capital has and continues to be one of the most significant barriers to the development of small business, especially by minority groups and women.

So, I thank you, Mr. Chairman, for this hearing. I look forward to the testimony that we are going to hear today, and thank all of those who have come to participate.

Thank you.

Chairman BARTLETT. Thank you very much, and I would like now to welcome our witnesses.

Let me say first that your prepared testimony will, without objection, be included as a part of the record, so we would encourage you to summarize in any way that you see fit.

Our witnesses today are Fred Hochberg, Deputy Administrator, Small Business Administration, then Anthony Wilkinson, President and CEO of the National Association of Guaranteed Lenders, Inc., and Joel Willemssen, Director, U.S. General Accounting Office.

Chairman BARTLETT. Mr. Hochberg, we would be pleased to get your testimony first.

Thank you.

STATEMENT OF FRED P. HOCHBERG, DEPUTY ADMINISTRATOR, U.S. SMALL BUSINESS ADMINISTRATION

Mr. HOCHBERG. Thank you.

Mr. Chairman and Congressman Davis, my oral testimony will address the questions that you raised, Mr. Chairman, in your opening statement, and all of what we are doing here will also address issues of access to capital, because we will have far better information from our lenders, where loans are being made, and where they are not being made, as a result of our efforts through this program.

Good morning, Mr. Chairman and Members of the Subcommittee. Thank you for inviting the U.S. Small Business Administration to testify about the progress we have made in planning for the implementation of our Loan Monitoring System. My name is Fred Hochberg, Deputy Administrator of the SBA. By way of introduction, I should add that I come to the SBA from the business

world. I served as President and Chief Operating Officer of the Lillian Vernon Corporation, a business founded by my mother which I guided from $6 million to $170 million over the course of 18 years.

One of the projects I undertook at the company was a complete enterprise-wide overhaul of my company's computer operations. But, before I get started I'd like to just brag a little bit. In yesterday's issue of Forbes magazine, the title is "Best of the Web," the SBA was cited as having the best web site. You can find that on page 76 of yesterday's Forbes magazine. So, we are developing a very strong IT program at the SBA and we are glad that Forbes recognizes it.

Joining me today are some of the senior executives who are responsible for the Loan Monitoring System. Behind me, you will find Kris Marcy, our Chief Operating Officer, Larry Barrett, Chief Information Officer, Charles Tansey, Associate Deputy Administrator for Capital Access, and Joe Loddo, our Chief Financial Officer. We are appearing on behalf of SBA Administrator, Aida Alvarez, whose schedule did not permit her being with us today.

Despite her absence, the Administrator is deeply committed to transforming the SBA into a 21st century institution, using the best practices of the private sector, as well as the most recent advances in technology. Let me summarize my rather lengthy statement, and I thank you for including this as part of the official record as well.

SBA's legislative mandate is quite clear. Simply put, our mandate is to serve as a gap lender, to ensure that those small businesses who do not have access to traditional means of capital have the funds necessary to start or grow their businesses. Our success in carrying out this mission has been nothing short of phenomenal. Since 1990, our loan portfolio has grown from $17.5 billion to over $50 billion. We now guarantee between 45,000 and 50,000 loans a year, three times the amount in 1990. And, we have made fundamental, major changes to the way we do business.

Just a few examples. Now, all routine servicing is handled in our centralized business and disaster loan centers. Seventy-five percent of all loans bypass the district offices. SBA has reduced burdensome paperwork and increased efficiency with the SBAExpress and LowDoc programs, programs that help borrowers needing less than $150,000.00 in capital.

We have completed our first round of safety and soundness reviews of the small business lending companies and are in the midst of our second round. This is a first for the SBA.

In accordance with our legislative directive, SBA now contracts out about a third of its disaster loan servicing. Seventy-five percent of our business loan portfolio is now serviced by the private sector, our lending partners, and we launched our first ever asset sale, which was quite successful, last August.

And, we did this with 22 percent fewer employees over the last decade. Obviously, this meant that the way we deliver programs had to change dramatically. You might say at this point, well, this is all well and good, but why not centralize even more. The answer goes back to our legislative mission, small businesses, new businesses, businesses without long credit histories, have special needs.

Just look at the current crisis in the home heating oil industry in New England, and I should add in Maryland. If banks were to send these loan requests from these small oil companies to our Sacramento processing center, they might well be turned down. Many of these companies have no borrowing history, many of them need technical assistance, and it does take local knowledge of the local marketplace to make these loans work. We must give these small companies the loans coupled with technical assistance to help them get back on the road to recovery.

We are all for centralization, but only if we can use it effectively in assisting our small business clients. SBA once made loans directly and did the credit reviews directly. Now, as I mentioned, 75 percent of all business loans are being made by our lending partners, with no or limited credit review by the SBA. This presents a level of risk, which you noted in your letter of invitation to this hearing, and this concern, Mr. Chairman, is why the agency began planning for a Loan Monitoring System back in 1996 and made its first funding request to Congress in February of 1997.

Our computer systems were originally designed 20 years ago, when SBA's once primary function was direct loan making. Simply put, our systems have not fully evolved to meet the challenges and the way our loan products are now being delivered by lenders. It is critical that SBA develop a computer system that allows us to rapidly identify and respond to variations in lending patterns.

Two major challenges face us as we move ahead. First, as a result of recent changes in the nation's banking laws, the face of lending has changed and changed dramatically. And, the industry has become increasingly polarized as mergers among large and medium-sized lenders have created a core of very large multi-state banks on one hand, and left an equally large number of rural and small banks on the other.

Secondly, we are challenged by the fact that technology systems are evolving rapidly. When we first began planning in 1996, the full power of the Internet was just beginning to be realized. And, its potential as a consumer banking forum was understood hardly at all.

In 1998, 6.9 million households were banking on line. The number is expected to grow to over 24 million by 2002. Thirty-nine of the largest consumer banks in the U.S. now offer Internet bill payment, up from just 17 a year ago. SBA must be able to keep pace or we will be bypassed.

Mr. Chairman, you are a scientist with numerous patents to your name. I understand you've held key positions in research and development. You, probably better than most, understand how critical it is to keep up with technology. I know that you and this subcommittee recognize the importance of our developing an effective Loan Monitoring System for all our loans, not just 7(a) and 504.

I recognize the contribution this subcommittee has made by outlining the planning steps which, along with the Clinger-Cohen Act, have guided the development of our system thus far. In fact, since the 1997 SBA Reauthorization Act, we have worked closely with the staffs of the House and Senate Small Business Committees and subcommittees, our appropriators and the General Accounting Of-

fice, to design a system which makes sense for all of our small business clients, and lending partners, and our staff.

As you requested, I have included a detailed description of the work we have done to fulfill the eight planning steps in my written testimony. These steps have proved to be beneficial. I am pleased with the work we have done thus far. We are now ready to go forward.

Let me summarize here some aspects of the planning work related to the benchmarking and business process reengineering. And, in fact, just yesterday we completed one additional step, which was pending and is now in final.

The purpose of benchmarking was to identify the best practices of organizations. At the beginning, our contractor, Booz-Allen & Hamilton, emphasized the fact that none of the organizations identified in the benchmark report performed precisely the same function as the SBA. Freddie Mac, in its multi-family program for example, deals with about 40 banks. SBA does business with over 6,000. The quasi-government entities we studied, like Freddie Mac and Fannie Mae, are also significantly different from the SBA, because they are involved in housing rather than commercial loans. Housing loans tend to be more homogenous. Conventional lenders in the study do not have SBA's mission of providing financing to those who do not have access to credit on reasonable terms. The difference is mainly due to our role as a gap lender, which I mentioned earlier. Nevertheless, their systems provided very good models for the SBA to use in developing our Loan Monitoring System.

There was one underlying theme throughout the benchmarking process, our inability to capture and analyze information which results in increased taxpayer exposure to credit risk. Booz-Allen & Hamilton recommended that systems be developed that would obtain information at loan origination and then automatically and seamlessly transfer the information throughout the organization.

I know that you are particularly interested in the use of credit scoring. Greater use of credit scoring to make objective, standard determinations of front-end risk was identified in the bench marking process. By the summer of 2000, SBA plans to begin using customized credit scoring to expedite the decision-making at its LowDoc centers. Specifically, when a loan guarantee request receives a credit score in the low risk range, the credit scoring process will replace one of the two manual credit reviews now required for loan approval.

The use of credit scoring, however, must be balanced. Credit scoring is not viable for new businesses and first-time borrowers, nor does it factor in anticipated business cash flows or other factors that SBA uses to determine ability to repay.

SBA's BPR represented an important step in the agency's modernization planning. The BPR study was conducted from December of 1998 through June of 1999, with a 40-member team composed of a cross section of SBA field and headquarter staff. The team recommended incorporating technology advances that were not even available five years ago. After the BPR, we made a number of management decisions. Using GAO's BPR Assessment Guide, SBA conducted a feasibility study. Senior management and a panel of program experts, who are not part of the BPR team, reviewed the 38

recommendations. Ultimately, 30 of the 38 recommendations were adopted without any change. The remaining eight were adopted with slight modifications to better meet our legislative mission as a gap lender.

Then, at the October field managers conference, SBA's senior staff reviewed the future role of the district office and the degree of appropriate centralization and decentralization. That subject was fully discussed and debated. In December, following review by senior staff, the Administrator adopted the recommendations of the feasibility study mentioned above.

What are the hallmarks of our Loan Monitoring System? We'll be electronic with our lenders. We will be paperless. We will use high-quality data and be timely. We'll hold lenders to strict performance standards. We will proactively perform risk management. We will strengthen our ability to do timely and accurate subsidy rate calculations.

Mr. Chairman, we have created a safe system. We can handle the challenge of doing business electronically. We have worked with the public key infrastructure group as we set up a secure Internet site for conducting SBA business and tested the use of digital signatures. We have two solid years of experience in addressing cyber intrusions and threats. SBA has taken aggressive steps to implement a proactive computer security program, including Internet monitoring, fire walls and two-step authentication to gain access to our site.

As a result of the planning process, we are ready to begin the initial development of the system. No further management decisions remain to be made for Iteration One. Also, we have nearly completed orientation of our field staff who will be using the new system. We will continue to solicit feedback from our private sector lending partners. We have been meeting with them monthly to implement a system which will work best for them, too. These forums are an essential ingredient to ensure we develop a system that works for the SBA, our lending partners, and small business owners.

Mr. Wilkinson will further elaborate on that.

I stress that we are ready to begin the initial implementation of the system. Through extensive consultation with GAO, we have recently provided greater detail on Iteration One, which we believe demonstrates that we are ready to begin. We will continue to work closely with GAO as we evaluate this prototype effort. We have purposely adopted an evolutionary or iterative approach. It is less risky. We are mindful of the mistakes that have caused other organizations to stumble.

Let me go back to our commitment. I hope I have convinced you that Administrator Alvarez and I, backed by the team who are sitting behind me, are totally committed to bringing the best of the technology to our agency. We will use electronic commerce in every facet of our operations, using it in our work and communications with every member of our staff and SBA family, our resource partners, and our small business clients. We are modernizing, and we are mindful of the risk associated with major IT projects. We are also aware of the greater risk of not proceeding.

As a result of our planning, we are now fully appreciative of the exposure we face. As stewards of federal resources, our failure to proceed would be irresponsible and imprudent.

Thank you for inviting the SBA to discuss with you the Automated Loan Monitoring System. I appreciate your continued support of this effort, and I ask for your support in the future.

I'd be happy to answer any questions you may have.

[Mr. Hochberg's statement may be found in appendix.]

Chairman BARTLETT. Thank you, Mr. Hochberg.

We now will turn to Mr. Wilkinson for his testimony.

STATEMENT OF ANTHONY R. WILKINSON, PRESIDENT AND CEO, THE NATIONAL ASSOCIATION OF GUARANTEED LENDERS, INC.

Mr. WILKINSON. Good morning, Mr. Chairman, Congressman Davis, Congressman Toomey. My name is Tony Wilkinson, and I'm the President and CEO of the National Association of Government Guaranteed Lenders, or NAGGL as we like to call it. We represent nearly 700 lenders and other program participants who cumulatively make approximately 80 percent of the 7(a) loans guaranteed by the SBA annually. We thank you for holding this hearing today and requesting our input on SBA's automation efforts.

I have learned today that one of the other reasons I was asked to be here today was to help bring the average size of the testimony down. My two colleagues have done an excellent job in covering the technical sides of the issue in front of us, and I'm going to speak briefly on what is going on from the lender's perspective.

Over the last decade, the SBA 7(a) loan program has experienced tremendous growth. What once was a fairly small program is today a $10 billion plus program. In the early part of the 1990s, the SBA processed the majority of the 7(a) loans. To better leverage private sector resources, so that we could provide access to capital, this process had to change and we had to rely more on preferred lenders and other means to deliver the product, and that has happened. This transformation is well underway at the SBA, and as Mr. Hochberg just said, 75 percent of all 7(a) loans last year were processed under the PLP program or other limited review procedures. So, again, the SBA is now better leveraging private sector resources, providing greater access to capital to small business, and doing so with fewer employees.

An integral part of SBA's success will be the development and implementation of the new Loan Monitoring System, and from the lender's perspective this will be no easy task. The agency must deal with the smallest of community banks, all the way up to the largest multi-district commercial banks, and non-bank lenders. These banks and lenders serve various geographical areas, so the needs of the lenders that will be involved in this new Loan Monitoring System are very different, and SBA has had a challenge in figuring out how to meet the needs of both extremes and every lender in the middle.

We agree that the SBA must gather sufficient data to manage its loan portfolio in a responsible manner, while not creating a reporting burden on either the borrower or the lender.

NAGGL thanks the SBA for the ongoing dialogue that we've had with our Automation Committee. It's been a pleasure to work with Mr. Hochberg and his staff, and from our perspective they are doing an excellent job in putting together the new Loan Monitoring System.

We hope this dialogue will continue. We do have regularly scheduled meetings, and we hope this continues especially since we are nearing the stage of refinement. One of the things that we are looking for in the not too distant future is a set of specifications with the data file elements that will help our lenders determine what we will have to do to comply with the new Loan Monitoring System.

NAGGL concurs that the Internet should be the standard medium for submitting loan applications and servicing actions. Reliance on the automated flow of information should create efficiencies both with the lender and SBA. We also appreciate SBA's willingness to work with lenders who are not technologically capable, by agreeing to accept applications by paper.

As well as having ongoing dialogue with the lending community, we hope that SBA is having a similar dialogue with their current contractors to make sure that they can specifically integrate their computer systems with what the SBA is planning. Hopefully, this will maximize results and there will be no duplication of efforts.

As equally important to the process of collecting the data, is the establishment of performance standards by which lenders will be reviewed. The SBA has recently established the Office of Lender Oversight, and it is our understanding that development of performance standards is one of high priority. NAGGL has long said that the SBA needed to be in the business of lender oversight, and we hope to work with the agency to develop performance standards that are appropriate to protect SBA's interests, but also reasonable, fair and focused on compliance with SBA rules.

Mr. Hochberg said in his testimony, both written and verbal, that one of the uses of the data collected in the new Loan Monitoring System will be to predict more accurately the future cash flow of loans and help with subsidy rate calculation. We, at NAGGL, hope this actually happens. For the last several years, the Administration has materially overestimated the cost of the 7(a) program by using a default estimate that is much higher than actual defaults. This means that borrowers are being charged fees higher than necessary.

In just the last few years, the Office of Management and Budget, per the agency's Fiscal 2001 budget request, now says they overestimated the cost of the 7(a) program by a total of $1 billion. Compared to the request of 7(a) appropriation for Fiscal 2001 of only $142.6 million, this to us is a serious problem. But, even though OMB has reported they overestimated the cost of the program in the past, primarily due to excessive default estimates, they did not change the default estimate, or materially change the default estimate, for Fiscal 2001. OMB is still using a default estimate that we believe is more than 40 percent higher than necessary. A 40 percent decline in the default estimate in the subsidy model would mean a 7(a) program subsidy rate of approximately zero. We would not need an appropriation for Fiscal Year 2001. NAGGL would ap-

preciate any help this committee could provide in helping obtain a more reasonable and fair subsidy rate calculation for the 7(a) program.

Mr. Chairman, thank you for the opportunity to appear today, and I'd be happy to answer questions.

[Mr. Wilkinson's statement may be found in appendix.]

Chairman BARTLETT. Thank you very much.

Now we welcome Mr. Willemssen, and look forward to his testimony.

Thank you.

STATEMENT OF JOEL C. WILLEMSSEN, DIRECTOR, CIVIL AGENCIES INFORMATION SYSTEMS, ACCOUNTING AND INFORMATION MANAGEMENT DIVISION

Mr. WILLEMSSEN. Thank you, Mr. Chairman, Ranking Member Davis, Congressman, thank you for inviting GAO to testify today. As requested, I'll briefly summarize our statement.

Overall, SBA has made substantial progress in completing the eight mandated planning actions for its Loan Monitoring System. SBA has now completed final or draft products for each of those required actions. For example, SBA has benchmarked its business processes against those of leading organizations, and has conducted a reengineering study to identify and select new processes to improve its operations. The reengineering study addressed the key business functions within SBA, such as guarantee procedures and lender oversight, and made numerous recommendations for improving the agency's business processes.

SBA has also started to identify the data needed for the proposed Loan Monitoring System, begun defining data quality standards, started addressing the target information architecture, initially defined system requirements, and estimated the costs to complete the project. Based on the results of the reengineering study, SBA has developed a general description of the Loan Monitoring System. The system is expected to be on line to all users around the clock. Internally, SBA staff are to have access to records from anywhere in the agency, while externally the system is expected to allow lenders to view their own portfolios. SBA plans to have the Loan Monitoring System linked to the Internet and be integrated with a secure web site. Currently, SBA estimates that the new system will cost about $27.7 million.

While SBA has made substantial progress in its planning for the Loan Monitoring System, it still must take a number of actions to reduce the project's risk. Let me highlight just some of those key actions.

First, SBA needs to identify the costs and benefits of a range of business process and systems alternatives to provide greater assurance that it is pursuing the most cost effective options.

Second, SBA needs to ensure that the system it is building will be integrated with its future agency-wide information technology architecture, so that the Loan Monitoring System will be able to work seamlessly with SBA's other systems.

Third, SBA needs to make sure that it implements plans for improving data quality, including defining standards and developing a schedule of actions to include data quality in the current systems.

Fourth, SBA needs to make sure it's defined key requirements for the Loan Monitoring System before proceeding with development.

And finally, SBA needs to provide a clear rationale for why automation of many of its business functions must be custom developed, rather than addressed through the use of commercial, off-the-shelf products.

As it proceeds with the Loan Monitoring System, SBA will also need to continue strengthening its project management processes and controls. It has started to implement these basic policies and processes, and they are really critical for such an effort as the Loan Monitoring System. For example, instituting capabilities such as project tracking and oversight are essential to be able to monitor actual results and performance against the schedule. In addition, implementing configuration management policies, which are a set of controls over changes to computer and network system changes, are important to successfully managing systems that intend to be as complex as the Loan Monitoring System. Further instituting quality assurance activities, to verify that system development complies with applicable standards, provides SBA's management with the information they need on whether the project is adhering to established standards and procedures.

Another key aspect that must be addressed is security and privacy of automated information. SBA's planned reliance on the Internet poses security challenges that must be addressed early in the project's life. Because of this, SBA needs to update its security operating procedures before it begins wide-scale development of the Loan Monitoring System.

That concludes the summary of my statement, and I'd be pleased to address any questions you may have.

Thank you.

[Mr. Willemssen's statement may be found in appendix.]

Chairman BARTLETT. Thank you very much for your succinct and informative testimony.

Let me turn now to our Ranking Member and ask Mr. Davis for his questions and comments.

Mr. DAVIS. Well, thank you. Thank you very much, Mr. Chairman.

Let me just indicate that I find this kind of testimony, especially the technical complexity of it, very intriguing.

Mr. Hochberg, I know that many lenders use credit scoring when they are processing small loans. My understanding is that credit scoring may not work well with small and new businesses.

I also noticed that you mentioned credit scoring and credit worthiness in your testimony. Can you indicate how you will use this information to assist start-up businesses, small businesses, real small businesses?

Mr. HOCHBERG. Thank you.

I think credit scoring is not really going to be applicable for very small businesses and start-up businesses. It looks at past payment history. However, we can use credit scoring on some of the more established businesses, where right now we have two separate financial analysts who review some of these loans. It will replace one

of them, so that we can use those resources better, perhaps, to work on more complex or trickier loans.

But, credit scoring is just one tool that we'll be using, one tool that we'll be importing from the outside, not reinventing, but use as an outside resource, an off-the-shelf program that we'll customize in some ways.

Mr. DAVIS. You really wouldn't have to have any fear that there is any possibility that this process or this mechanism could be used to redline. I'm always fearful of redlining, in terms of having gone through those experiences and having seen how sometimes the establishment of standards and criteria will box some people out because they just, for a number of reasons, may not be there.

Mr. HOCHBERG. I think that with this Loan Monitoring System we will have better information on which banks are making loans, where they are making the loans, and the kind of businesses they are financing. So, in some ways I believe the opposite will happen, we'll have far better data to understand where the gaps exist, so that we can better address those gaps. And, if we find in certain districts or neighborhoods that there is lower lending activity, which we'll have a better handle on, we can go out and recruit other banks and other lending institutions to make sure that access to capital is not part of the problem.

Mr. DAVIS. In his testimony, Mr. Wilkinson mentioned a desire or the desirability of SBA being a bit more specific in terms of specifications for compliance. How would you respond?

Mr. HOCHBERG. I'm not sure I fully understand that question.

Mr. DAVIS. Well, I think he, could you mention that again?

Mr. WILKINSON. I'm not sure I understand the question either.

What I said was, we were looking for a set of specifications that they expect to publish soon, so that our lenders will know exactly what data file elements the SBA is looking for, so that we can then sit down with our computer folks to see what we have to do to comply.

Mr. DAVIS. That is exactly my question. Is that forthcoming?

Mr. HOCHBERG. We will be putting out the performance standards and how we will evaluate and analyze different lender performance, so that banks will know precisely what are the criteria in terms of their PLP status and how they operate with the SBA. That will be much more explicit than it's been in the past.

Mr. DAVIS. Also, Mr. Willemssen mentioned in his testimony some question in relationship to custom development of data quality, in terms of whether or not there can be a boilerplate, I would assume, set of data as opposed to having to customize for so many different entities and, perhaps, at different times. How would you respond to that question?

Mr. HOCHBERG. It is our desire to use as much off-the-shelf software as we possibly can in each phase of the program, because this is a large system that has a lot of components to it. We mentioned credit scoring. We'll be using D&B or a similar company in terms of getting credit analysis, but we will be, as much as possible, using off-the-shelf systems because they are, frankly, less expensive.

What we did find, though, up to this point, is that we found fewer parallels, fewer exact matches in the private sector or in

other government agencies than we, perhaps, had thought at first. So, we probably will rely a little bit more on customization than, perhaps, we would desire, but we don't have a choice in this matter.

Mr. DAVIS. Thank you.

Mr. Willemssen, I thought that you were quite complimentary to the SBA, in terms of progress that it has made towards compliance. Are there any areas beyond what you have discussed where you think there is a need or that they could make more progress or more effort?

Mr. WILLEMSSEN. I think, Ranking Member Davis, I tried to summarize those pretty well in the opening statement, and what we've seen on the part of the Deputy Administrator and his staff is a real willingness over the last few months to work with us. They have been very responsive to the issues we've raised.

We do have some remaining issues that we would like them to pursue. I'm not aware that they disagree with the need to implement those actions. There may be a slight disagreement on what that means in terms of the roll-out of the eventual system, but we'll continue to work with them to help ensure the project's success and reduce the risks as much as possible.

Mr. DAVIS. Thank you.

Mr. Wilkinson, you, likewise, were quite complimentary, and I think we always like to see various partners being able to work cooperatively and work well, because that generally means there's going to be a different level of success.

Are there any other areas that you'd like to see some additional effort or additional movement in?

Mr. WILKINSON. Well, as I said in my testimony, one of the key areas that we want to watch is the development of performance standards, and once we've figured out, okay, what do we have to submit up front on a loan application to comply, we've now collected certain amounts of data, well now, what are we going to do with that data, and how is the lender going to be graded, if you will. And so, we are looking forward to working with the agency on developing those standards over the coming months.

And, the only other comment I would have is, the agency is hard at work at this. They have dedicated some serious resources to getting this done. Iteration One is scheduled to be finished by summer of 2000. My only concern is that if, for whatever reason, that doesn't get finished by the summer of 2000 and we slide, we'd move into a presidential election, a change of administration, changes in leadership at the agency, that the project could get bogged down.

So, we in the lending community are hopeful that while the ball is rolling that this project does get finished, at least Iteration one, this summer, because they've got a lot of folks working on it right now.

Mr. DAVIS. Perhaps, this is my last question, Mr. Chairman.

Mr. Hochberg, you heard that question. It's also a thought that I've had, in terms of sometimes if administrations change, and when they do, certain policies within agencies sometimes will also change. As a person inside the agency, can you give us any assurance, while you can't ever give absolute assurances, but can you help belay any concerns that we might have in relationship to that,

relative to what's being instituted internally to make sure that there is a continuation?

Mr. HOCHBERG. One, I just want to add, I think we've been working hard and have a very good relationship with the General Accounting Office and NAGGL, so, one, our outside partners, that is not going to change, and that is a steady factor.

Additionally, the team that is sitting behind me, our Chief Operating Officer is a career person, and our Chief Financial Officer is a career person. Larry Barrett is our Chief Information Officer, career person. They will be here regardless of a change in administrations. But, I do think that Tony mentioned one important thing. The best way to ensure that there is less interruption is for us to get moving and start implementing, to get this project underway.

The concern always is with a change of administrations that when things are simply in draft form or planning form, there's a good reason to reevaluate everything, but if we are making progress, as Tony mentioned, having Iteration one installed, working it through, we will learn so much by installing that first iteration that will inform the rest of the process. I think that's the best assurance that we keep this thing moving and moving rapidly.

Mr. DAVIS. It seems to me that progress is, indeed, being made, and so I want to compliment you on, not only the effort, but what appears to be a great working relationship, and certainly it seems to me that you are moving positively towards implementation.

Mr. Chairman, I don't have any other questions. I thank you very much.

Chairman BARTLETT. Thank you very much.

We'll turn now to Mr. Toomey.

Mr. TOOMEY. Thank you, Mr. Chairman.

Just a couple of quick questions. Mr. Hochberg, it's my understanding that this Loan Monitoring System has been designed with the 7(a) program in mind. Could you just comment whether there's any applicability at all to the other loan programs, or where that stands?

Mr. HOCHBERG. Yes. This loan program was designed initially with the 7(a) program in mind. It does include the 504 program. It includes microloans and those loans are really made to intermediaries. In addition we did some disaster planning models in modules for our disaster loan, which is a direct loan program. So, we did some front-end work to make sure that this system will encompass the full range of lending that we do.

Mr. TOOMEY. Okay.

And, I think it was Mr. Willemssen who suggested that one of the areas that continue to need development, if I understood correctly, was to ensure that the system is fully integrated with the MIS agency-wide, and could you just comment on that, how you see that proceeding?

Mr. HOCHBERG. Let me emphasize, we know this is a large project for the SBA. This is a big systems development effort, larger than we have tackled before, which is why it has been such a deliberate process, why we've gone through the eight steps, why we've worked so closely with GAO, with our outside partners, and have brought in a number of consultants and contractors.

But, the architecture has been developed. We are waiting for the final draft of that to come back from our contractor to review. That is an essential platform that has to be in place before we go further.

So, we are fully in agreement on that.

Mr. TOOMEY. And, last question, when all is said and done and this is finished, what do you think the total cost will have been?

Mr. HOCHBERG. Well, I think the total cost we currently are estimating at $27.7 million, will be the total cost for phase one of this system. That is for the Loan Monitoring System. That does not include the overhaul of our financial systems, which we have just begun, including our human resources as well as contracting programs, and some of the other technical assistance programs. So, I should just add that's the cost estimate only for phase one.

Mr. TOOMEY. Okay, thank you.

Mr. HOCHBERG. And, that is an estimate.

Mr. TOOMEY. Okay, thank you.

Chairman BARTLETT. Thank you very much.

Let me ask a technical question or clarification first. I wonder if you could put back up the chart which is entitled, "Doing More With Less." You said in your oral testimony that you were now doing more with less, and that you were now using 22 percent less employees in the last decade.

If I look at the chart, it would appear that in the last decade your number of employees has dropped to about 50 percent. I was just wondering, was your oral statement wrong or is the chart drawn incorrectly?

Mr. HOCHBERG. Our total employees are down. The problem with the chart is we should have a scale on the left side to show total number of employees.

Chairman BARTLETT. I'm presuming the scale was linear, no matter what the scale is, if it's linear why it would appear that in the last decade it's dropped almost 50 percent. Has it not?

Mr. HOCHBERG. Let me just get a clarification. The staff in 1992 was 3,874 employees. In 1999, we are looking at 3,123 employees, which is a reduction of 751 to be precise, so that would be the exact number.

Chairman BARTLETT. Okay. So then, the chart is drawn incorrectly.

Mr. HOCHBERG. Probably the scale is off. The staff part of the chart appears to be on the high side.

Chairman BARTLETT. Okay, thank you very much. The two just didn't jibe, and I wanted to make sure why.

Mr. Wilkinson, you mentioned that the default rates were too high, which means a lot of monies have accumulated because they were not needed to cover those default loans. One of two things presumably could happen as a result of that. One is that less monies could be appropriated because monies have built up. Is there a second alternative, and that is that we now could make more loans because we have the monies there?

Mr. WILKINSON. No, sir, that money automatically goes to Treasury. It is gone. There is the agency cannot use those funds.

Under the Federal Credit Reform Act, the agency must estimate what the net present value cost of their program is, and that is

done based on entering the future cash flows, how much fees we are going to charge borrowers and lenders to be involved in the program, so all the fees are set up front. As time passes and we get actual numbers, the actual numbers replace the estimated numbers, and there's a reestimate amount, either positive or negative, that either flows to Treasury or is borrowed from Treasury. Borrowed is the wrong word, or received from Treasury, to settle up the account.

But, what has happened over the last several years is, there's always been too much money estimated up front, so that the amount of appropriations, fees charged to borrowers and fees charged to lenders, has been more than has been necessary. But, under the Federal Credit Reform Act, those monies flow straight to Treasury and they are gone.

Chairman BARTLETT. I thought I heard you say in your testimony that enough monies had accumulated that we wouldn't need any appropriations for the next year.

Mr. WILKINSON. No, well I was trying to draw the comparison of how much had been overestimated, how much the cost of the program had been overestimated, in relation to what we had to obtain in appropriations for the Fiscal Year 2001 budget.

Chairman BARTLETT. Okay, but there are no monies that are available to you, because at the end of the year they simply return to Treasury.

Mr. WILKINSON. That is correct.

Chairman BARTLETT. So, we need to take cognizance of that in future appropriations, so that surplus monies don't need to be appropriated, is what you are saying, because they can't be used and simply go back to Treasury.

Mr. WILKINSON. Well, each year we must get an appropriation to fund a certain program level, and what we are saying is that the estimates used in that are too high. We still have to have those appropriations, because once OMB sets the subsidy rate number it is set, and we have to live with that. So, the Fiscal Year 2001 subsidy rate is set, and for us to have sufficient monies to loan to small business we must obtain the appropriation.

Where we need to focus is more on the Federal Credit Reform Act and the kinds of estimates that OMB is allowed to use in the model.

Chairman BARTLETT. Thank you very much.

The purpose of our hearing today, of course, was to determine the status of planning or implementation of this Loan Monitoring System. Mr. Hochberg, in your oral testimony you said that we were now ready to go forward. I gather from subsequent remarks you made that you feel that you are now ready to implement the system.

The monies, of course, as a result of Section 233 of the Small Business Reauthorization Act of 1997 Act, have been fenced, and they will not be released from the appropriators until a signal from our committee, and that signal will not be made until we get a signal from GAO that you, in fact, have completed those eight planning steps that were mandated by that Act.

Mr. Willemssen, in his testimony, and his summary, went through and I think I numbered them correctly, a dozen items that

in his view need to be completed. I am presuming, Mr. Willemssen, that your position is that these actions need to be completed before you can certify that these eight planning steps have been completed, so that the system can now be procured.

Mr. WILLEMSSEN. The majority of those actions we would want to see completed before SBA embarks on major design and development activities associated with the Loan Monitoring System. To the extent, and this is the subject of some discussion that we've had with SBA over the last day or two, to the extent that their Iteration One is viewed as more of a prototyping effort and something that helps them learn more about what they want the system to do, then I would reduce that list to a much smaller number.

We have received some information from SBA on exactly what that first iteration associated with the system is, but not enough yet to make a final determination.

Chairman BARTLETT. Thank you.

Let me go through the list, if I might, and just ask each of you your position on it, and then I would like to get an estimate of time to complete. It's my understanding that there are more than adequate monies there to complete the planning?

Mr. WILLEMSSEN. Correct.

Chairman BARTLETT. Okay.

Number one was, completing the analysis of benefits and costs for alternative business processes identified through SBA's business reengineering effort. This is a task that needs to be completed, in your judgment, Mr. Willemssen, before we can certify the system as ready to be implemented?

Mr. WILLEMSSEN. Yes. We would like to see additional information on costs and benefits associated with a range of alternatives for going forward with the major system development activity.

Chairman BARTLETT. Mr. Hochberg, do you understand what GAO is interested in here, and do you agree?

Mr. HOCHBERG. My understanding in working with Joel, is that what is needed is a more explicit articulation of what the cost benefits are program by program, not the total system, but by elements of the program. That's my understanding. But, associated with what options that the agency will pursue is making sure that those are the most cost effective options, so that we are getting a system that meets everyone's needs at the lowest possible cost.

Chairman BARTLETT. And, how long should it take for that to be implemented? Your guess, Mr. Willemssen, and then I'll ask Mr. Hochberg his.

Mr. WILLEMSSEN. I would say it would still take a couple months more work on the part of SBA to do that.

Chairman BARTLETT. Any argument with that, Mr. Hochberg?

Mr. HOCHBERG. I probably should ask Larry Barrett, our Chief Information Officer, to give a more precise estimate of that kind of information.

Mr. BARRETT. Larry Barrett, Chief Information Officer, Small Business Administration.

I estimate it slightly shorter than that. We are estimating somewhere from four to six weeks to accomplish those tasks.

Chairman BARTLETT. Thank you very much.

The second one I have identified here is performing benefit cost analysis for systems alternatives.

Mr. WILLEMSSEN. Correct, and that can actually be associated with the item that we just talked about. As SBA goes through the business and system alternatives, it should determine the costs and the benefits of each.

Chairman BARTLETT. So, if they completed the first project that we talked about, they would have to finish the second

Mr. WILLEMSSEN. The two should be done in concert.

Chairman BARTLETT. Okay, so the two months, or the four to six weeks estimate on the part of the agency, should accomplish both of those first two. All right. Thank you very much.

The third one I have identified here is completing the part of its information architecture that specifies the rules and standards for interoperability and maintainability of interrelated systems.

Mr. Willemssen.

Mr. WILLEMSSEN. If SBA puts the necessary resources to that task, there's no reason that they can't have an initial identification of the standards and protocols they want to adhere to in a matter of several weeks. It's just a matter of putting the resources on it.

Chairman BARTLETT. Mr. Hochberg, you have the resources to get this done, and do you agree with several weeks?

Mr. HOCHBERG. Let me just add, Mr. Chairman, that the money you mentioned, the $8 million that was appropriated for 2000 that is fenced off, some of this project can be done by internal staff that is dedicated to this project. However, the funds to pay that staff are actually in that $8 million appropriation. The only money we have is fenced off, parked at FEDSIM to be used for outside contractors. But the money needed to have our internal staff keeping doing this work and doing it more thoroughly, we do not have access to those funds.

Chairman BARTLETT. Mr. Willemssen, from your testimony it was my understanding that adequate monies were there, do you understand that some of those monies are fenced so that they are not available, and who needs to take action to make sure they are not fenced so that they can complete the planning?

Mr. WILLEMSSEN. Well, our view of the monies available, it's a matter of whether SBA wants to decide to use in-house resources or contractor resources to get some of these activities accomplished, and then laying out a clear schedule of activities for who is going to do what and when.

It would certainly appear to us, based on the information we have at this point in time, that adequate funds are available for those planning activities. If SBA or the Deputy Administrator has information to the contrary we'd be more than happy to look at that.

Chairman BARTLETT. But, the information you now have available, you would indicate that probably there should be enough monies there to complete the planning?

Mr. WILLEMSSEN. Yes, sir, Mr. Chairman.

Chairman BARTLETT. And, they are not fenced and we do not have to take action to release them?

Mr. WILLEMSSEN. I do not have evidence of that for the planning side.

Chairman BARTLETT. Mr. Hochberg, if that is true, if monies which you need are fenced and some action needs to be taken to release them, would you please indicate what is fenced and what actions need to be taken, so that your progress will not be slowed due to lack of available monies?

The fourth one was identifying requirements and data elements for reports.

Mr. Willemssen.

Mr. WILLEMSSEN. SBA has made progress on this and is getting close to having a standard set of data elements. I think it was discussed somewhat in the testimony earlier that the lenders want to have this information too. SBA just needs a little bit more on the input and output side on the level of detail, but I think they are getting fairly close on that.

Chairman BARTLETT. What is close in terms of time to complete?

Mr. WILLEMSSEN. I would say, again, within a period of several weeks.

Chairman BARTLETT. Several weeks?

Mr. Hochberg.

Mr. HOCHBERG. Mr. Chairman, generally GAO is conservative, so if they say several weeks I'm comfortable with that estimate.

Chairman BARTLETT. Okay, thank you.

Let me ask a question, when you are saying several weeks, and four to six weeks, and two months and so forth, are you presuming, are both of you presuming that there are adequate resources there that these times can run concurrently, or they have to run sequentially?

Mr. WILLEMSSEN. No, many of these activities can run concurrently, and that's why I would echo the comment I made earlier, it's a matter of SBA putting the needed resources on these activities to get them done in that time frame.

Chairman BARTLETT. When we finish this list, we'll go back again and ask you to look at the longest one of these and ask the question, are there enough resources to complete them all within that time period, or do some of these have to be sequential, simply because maybe some of them can't be done until others are done, or because the same people are needed to do two of them. You can't do two things at once.

Mr. WILLEMSSEN. Right.

Chairman BARTLETT. So, we would like to come away with a feeling as to the maximum amount of time it's going to take in addition to the amount of time it's going to take for each of these components.

Five, completing the definition of specific data, quality standards, did we cover that one?

Mr. WILLEMSSEN. Yes, among the items we'd like to see there is more specificity on SBA plans to clean up the data before embarking on major software design efforts.

Again, depending on how Iteration One is defined, something like this can possibly be delayed. The data quality standards are absolutely essential eventually but not as pivotal in terms of finishing them before proceeding.

Chairman BARTLETT. In other words, you are saying that you could certify to us that they were ready to buy equipment before this was necessarily completed?

Mr. WILLEMSSEN. Right, there would be other activities that would be higher on the priority list to address. Data quality must be addressed, it's absolutely essential. But in terms of doing this before proceeding with the initial system design, I'm not as concerned.

Chairman BARTLETT. With an adequate understanding between GAO and the agency, you then could certify to us that they were ready to procure if you had a good feeling about how they were going to address this?

Mr. WILLEMSSEN. Right, and we saw the specific milestones that SBA officials have laid out for when they are going to do this and how, and then they have the project management oversight to track what actually happens against that schedule.

Chairman BARTLETT. Okay, thank you.

Number six, ensuring that systems requirements document include capacity and performance requirements.

Mr. WILLEMSSEN. This is possibly the one of the eight that would take the longest, in my opinion, especially if Iteration One is the beginning point of a typical system design and development effort.

Among the things that SBA needs to still look at here are specifying exactly what they want the system to do from a capacity perspective and a performance perspective. For example, how big is this going to be? How many lenders are going to be accessing it? How many employees and, therefore, how much horsepower do we need, how much communication throughput do we need? What kind of performance are we expecting? Are we expecting immediate on-line access 24 hours a day? That has ramifications for the size of the system, which has ramifications for the cost.

So, there are still some issues here that SBA needs to look at. Again, I want to reemphasize, to the extent that Iteration One is more of a prototyping effort, where SBA tries to learn more about what they want the system to build, then we're less concerned with making sure this is fully done before they proceed.

Chairman BARTLETT. But, if you don't know the system's capacity needed and the performance requirements, how can you size the system?

Mr. WILLEMSSEN. Well, you can't from a traditional life cycle approach to system development. Again, and that's why if they wanted to take an initial prototyping effort to get some more indication and validation of where they think they are going is correct, then that's a more appropriate strategy. But, starting on a major system design and development effort with not knowing those exact specifications on capacity and performance, that's a little more risky.

Chairman BARTLETT. I'm familiar with prototyping in the defense area, where you acquire a prototype system and you gain experience with it. You now know what you need to change so that the next one will be better, that's not what we are talking about here. You are not talking about a prototype system that they are going to get some experience on and then discard and buy the real thing?

Mr. WILLEMSSEN. I don't have the full description of the system at this point, for example, a statement of work on exactly what would be involved right now in SBA Iteration One. I'd defer to the Deputy Administrator, but I know SBA is considering looking at testing some different scenarios, some different prototype systems, to see that the requirements that they've laid out to date are reasonable.

Chairman BARTLETT. Am I also correct in assuming that this cannot be done until some of the other things are done, because you will have to have completed some of the others before you could get an estimate of the capacity needed and the performance requirements, would you not?

Mr. WILLEMSSEN. That is correct.

Chairman BARTLETT. So, this will be sequential.

Mr. WILLEMSSEN. That one is, from a couple perspectives, a bit more sequential, and, again, is the one that probably holds SBA up the longest.

Chairman BARTLETT. Now, once they are able to start with that, have the information necessary to start, how long will it take to complete it in your judgment?

Mr. WILLEMSSEN. To complete Iteration one?

Chairman BARTLETT. No, to complete ensuring systems requirements document, include capacity and performance requirements. You can't do that until some of the other things are done. Once the other things are done, how long will it take to do this one?

Mr. WILLEMSSEN. I would say my best estimate would be early summer 2000, to have it all done, from a system requirements standpoint.

Chairman BARTLETT. Okay, so you are talking about four months.

Mr. WILLEMSSEN. And again, those time frames are driven based on the point that you made a few minutes earlier. We have to look at where the resources are, and does SBA have available resources from a contractor and in-house perspective. And my other caveat is, as the Deputy Administrator mentioned earlier, dependent upon the approach they want to take with Iteration One.

Chairman BARTLETT. Okay.

Mr. Hochberg, do you agree with this estimate?

Mr. HOCHBERG. Let me respond to that. I'd also like Larry to respond, since it is his direct responsibility to do this implementation.

I should add for a point of clarification that I will also follow up in writing, the funds for 2000, to pay for staff to do this work, because this is a blend of both contractors and staff, are held by Chairman Rogers' Appropriations subcommittee. We cannot use those funds, to pay internal costs to do this work until that money is released.

The money we have access to at the moment is at FEDSIM, which can only be used for outside consultants and outside contractors. None of that can be used to pay the people that at the direction of the committee we have brought in house to ensure continuity in the planning process. Therefore, we are using regular salaries and expense funds—not modernization funds—until we get that release from Chairman Rogers.

But, let me ask Larry to respond to the timing issue.

Mr. BARRETT. Larry Barrett, CIO.

We disagree with GAO's estimates. We think that we can do it probably in a slightly shorter period of time for two reasons. The first reason being that we think that we have collected a lot of that information already, although we haven't provided it to GAO yet, and the second reason is that we view Iteration One as a prototype, and we need that prototype or we need that first iteration to provide additional information for us to do the capacity planning for the full-blown system that will come later.

Chairman BARTLETT. Okay.

Let me ask Mr. Wilkinson, I gather that you have not yet determined whether prototype equipment needs to be acquired and work lists before completing final system design. At what point will you be comfortable with whether or not that needs to be done, so that the monies necessary for that, I'm gathering that the monies necessary for acquiring the prototype are fenced, and they would need to be released, and that will require your agreement and the agreement of this committee and the Appropriations Committee before that's released?

Mr. WILKINSON. I would be more comfortable with Iteration One when I saw a document such as the statement of work, for what the contractor is exactly supposed to do for that particular iteration, and we have evaluated that, discussed it with SBA, and made some determination as to the adequacy of that approach.

Chairman BARTLETT. Okay. So you need proper documentation

Mr. WILKINSON. And, I have not seen that to date.

Chairman BARTLETT. So, that needs to be done before you can reach a considered judgment.

Mr. WILKINSON. And, the SBA may have it done, we have not yet been provided that document.

Chairman BARTLETT. You've just not seen it yet. Okay.

Now, the seventh one was ensuring that sound justification exists for pursuing custom development functions. I gather that GAO has a concern that not enough COTs, commercial off the shelf, is being planned, and that the agency is considering pursuing some custom developments that may not be necessary in your judgment?

Mr. WILKINSON. Well, the Deputy Administrator has discussed this point, the fact that they will, to the extent possible, try to pursue commercial off-the-shelf products. We think that's the right approach, because generally speaking you can get those done quicker and at less cost.

It was a bit surprising to us to see that about 40 percent of the functions needed non-COTs products, and we just wanted to see the written justification and rationale for why it was that high. So, it's not to say we don't believe SBA, we would just like to see what documents support that, given that that kind of approach generally results in higher costs and lengthier time frames.

Chairman BARTLETT. Okay.

Mr. Hochberg, does the agency have the justification for the custom developments, rather than going commercial off the shelf?

Mr. HOCHBERG. Mr. Chairman, we are looking at that. There are many parts of the Loan Monitoring System. So on a system-by-sys-

tem basis we are looking at commercial off the shelf versus in-house programming across the board.

I come from the private sector. I ran a business for 18 years. The last thing I would want to see done is reinventing the wheel, developing things that can be found on the outside. I have zero interest in that whatsoever.

I agree with Joel entirely, it takes longer, it costs more money to do a custom solution. So, to the extent possible we want to find off-the-shelf programming in the same way we want to centralize as many processes as possible.

Chairman BARTLETT. When will you have completed that analysis, to be able to get that information to GAO?

Mr. HOCHBERG. I should ask Larry to give you the precise timing on that.

Mr. BARRETT. The COTs decision will be an ongoing evaluation as we go through the various iterations of the system. We will constantly be looking to see if we can purchase off-the-shelf software. We'll make a decision on Iteration One before we proceed in Iteration One, and then use that information in terms of deciding about the software for the succeeding iterations as we go through them.

Chairman BARTLETT. Thank you.

Mr. Willemssen, the eighth item I have here is estimating the cost to completion that are based on an analysis of the benefits and costs of system alternatives. Do I conclude from this that you aren't sure that the, what, $27 million is the right amount?

Mr. WILLEMSSEN. Yes, in terms of SBA's effort on this particular action, it is substantially completed at this point. However, when they embark on additional analyses and costs and benefits of alternatives, that figure could change, and so they will have to refine the figure after the cost benefit analysis. And, we also think it's important for SBA to look at the Loan Monitoring System from a life cycle perspective. That's what's typically done on major information systems, is you don't only look at the design and development costs, but the operation and maintenance costs down the line, and the anticipated life of the system.

Chairman BARTLETT. Thank you.

You have also identified four areas in the project management area where SBA should strengthen its project management process and control, and I just wanted to go through those briefly to see how much time that was going to take, and would their ability to do these things impact the final schedule.

The first of these was to include putting in place project tracking and oversight capabilities.

Mr. WILLEMSSEN. Yes, project tracking and oversight are very important for a major effort like this. In the grand scheme of information technology government-wide this is not such a huge effort, but for SBA it is. It's the biggest one they've ever undertaken.

The reason that these four are a little different than the other eight, is they transcend boundaries. These have more to do with key processes and controls that SBA needs to implement agency-wide. This is not something that like the eight actions before that we can point to and say, do it for this project. It's something that has to be implemented more from an agency-wide perspective. It's

almost cultural, that when we have a major system effort like this, we are going to have project tracking and oversight activities.

On all of these, not just project tracking and oversight, SBA is committed to the changes. But it does take time, and it's not something that you can say will be done at a certain point in time. They have to continue strengthening those processes.

Chairman BARTLETT. Was it your presumption that they would have done these four things when you gave us the time estimates for completing the first eight?

Mr. WILLEMSSEN. It was our belief that these would be in the process of being implemented, but not fully mature. Fully mature information technology processes take a long time to implement, and most of the federal agencies are not there yet.

To the extent that those processes and controls become more mature, you've reduced the risk of systems that don't work as you expected, and you reduce the risk that they go over budget. This is more of a agency-wide scope, it's a little bit broader than just the Loan Monitoring System. It's the way information technology should be done, not only the federal government, but all major organizations. This is followed predominantly on a model initially developed by the Software Engineering Institute out of Carnegie-Mellon.

Chairman BARTLETT. Thank you.

Mr. Hochberg, let me read these four to see if you agree that these are things that need doing and that you are doing, and that it's your judgment that you are working with GAO to accomplish these goals. The first was putting in place project tracking and oversight capabilities. The second was implementing configuration management processes. The third was acquiring independent verification and validation for the Loan Monitoring System project and establishing an internal quality assurance function, and the fourth was addressing the security challenge posed by internet-based access to Loan Monitoring System functions and data.

Mr. HOCHBERG. Mr. Chairman, it is my understanding and my sense, as the Deputy Administrator, I am not the Chief Information Officer, that all four of those are in place. I can particularly speak to two, and I can let Larry fill in some details.

On the independent validation and verification, again, coming from the private sector, again, looking at how other agencies have tackled major systems projects, I wanted that IV & V to make sure that we don't stumble in the way that some other organizations have stumbled.

In terms of security, this was a material weakness that was cited in the 1998 audit of the agency. The Administrator put into place, upon receiving that audit, immediate plans to upgrade the security of computer data, as well as internet security. We've brought in a contractor, and added a number of staff to specifically address that item.

The other two I'm going to let Larry address, and certainly he may want to add to what I've just said.

Mr. BARRETT. As was indicated, this is going to be an ongoing effort, but we have taken significant steps, I think, to address project tracking and configuration management.

A couple of things that we are doing is that we have provided our staff, internal staff, with formal training in both project management and configuration management, and we have been given the authority to hire additional people. One of the requirements and one of the things that we are looking for when we bring in new staff members is for people to bring in people with experience in these basic areas, so not only will we have people already on staff, but bringing in new people. In the interim what we are doing is hiring contractor support to mitigate any weaknesses that we have in both the project tracking area, as well as configuration management and quality assurance.

As the Deputy Administrator indicated, we have a big effort underway in terms of Internet security, and just security in general within the agency. We started that over six months ago. The Administrator made a major commitment in terms of both resources and dollars to enhance our programming, and that's well under way.

Chairman BARTLETT. Thank you very much.

I want to thank the witnesses very much for their testimony. This is a necessary oversight responsibility of the Congress. We are pleased with the progress that SBA has made in the roughly year and a half since our first hearing. We are pleased that SBA and GAO are working together. We are pleased that there is a general meeting of the minds as to what yet needs to be done and how long it will take to do that, and I promised that we would come back to look at an overall time.

If things go reasonably well, Mr. Willemssen, you are saying it will be early-mid summer before we would be in a position to proceed with procurement?

Mr. WILLEMSSEN. The caveat I would have is based on a comment that Larry made. If the agency does have additional documentation associated with system requirements that we haven't seen, that substantially address the issues we've laid out, then I would up my estimate further, but I haven't seen those documents.

Chairman BARTLETT. So, with what you've seen you are saying it's mid-summer?

Mr. WILLEMSSEN. Then I'd say early summer.

Chairman BARTLETT. Early-mid summer.

Mr. Hochberg, that's reasonable?

Mr. HOCHBERG. It's reasonable to me.

Chairman BARTLETT. Mr. Hochberg is nodding in the affirmative that it's reasonable.

Well, let me thank you very much, and if you need some action to release funds, GAO is not sure that those funds need to be released. Our staff is not sure they need to be released, but if in the judgment of the agency you do not have adequate funds and you need funds released, please substantiate that, document that, and get it to us, and also to GAO so that if there are necessary steps to be taken they can be taken, because we would like the control of these lending programs to be moved from the agency to the private sector. That cannot be finally accomplished and implemented until this is done, so we are anxious that it be done expeditiously.

Let me thank all of the witnesses very much for your testimony, and we will keep surveillance of this program and there may need to be an additional hearing before the funds are finally released.

Thank you very much.

Mr. HOCHBERG. Thank you, Mr. Chairman.

Chairman BARTLETT. The meeting is in adjournment.

Mr. WILKINSON. Thank you.

Mr. WILLEMSSEN. Thank you.

[Whereupon, at 11:29 p.m., the subcommittee was adjourned.]

ROSCOE BARTLETT, MARYLAND
CHAIRMAN

DANNY K. DAVIS, ILLINOIS
RANKING MINORITY MEMBER

Congress of the United States
House of Representatives
106th Congress
Committee on Small Business
Subcommittee on Government Programs and Oversight
B-363 Rayburn House Office Building
Washington, DC 20515-6516

February 29, 2000

OPENING STATEMENT

CHAIRMAN ROSCOE G. BARTLETT
SUBCOMMITTEE ON GOVERNMENT PROGRAMS AND OVERSIGHT
HOUSE COMMITTEE ON SMALL BUSINESS

Progress in Planning for Proposed 7(a) Automated Loan Monitoring System

Good morning and welcome to this hearing of the Subcommittee on Government Programs and Oversight of the Committee on Small Business. A special welcome to those who have come some distance to participate and to attend this hearing.

Today we will examine a matter that is of great importance to the taxpayers who expect the 7(a) government guaranteed loan program to be well managed and remain solvent. The hearing is important to Congress in its oversight role and to the U.S. General Accounting Office which is responsible - through the audit function - to provide accurate information as to the financial condition of federal government programs. And this hearing should be of importance to the Small Business Administration - known here in Washington as "SBA" - the federal agency that is responsible for the day-to-day direction of the 7(a) loan program.

Section 233 of the Small Business Reauthorization Act of 1997 (Public Law 105-135) requires that SBA complete eight mandated planning actions before the agency obligates or expends any funds for the development and implementation of the proposed new, automated 7(a) loan monitoring system. It would seem only a matter of common sense that the planning phase should be completed before an agency makes major software and hardware purchases for a new computer system.

The proposed new automated loan monitoring system for the 7(a) loan program was the subject of a prior hearing of this Subcommittee held on July 16, 1998. We were encouraged by testimony at that hearing that the Small Business Administration had a project plan, but none of the eight planning steps had been completed.

We in Congress support the Administrator's initiative in relying more on the private sector in the 7(a) loan program. We support SBA's turning over to hometown bankers the decision to originate loans and the responsibility for servicing and liquidating loans. Certainly the local banker has more knowledge of the lender and his or her credit worthiness than bureaucrats located some distance form the community in which the loan is made.

Also, there is broad-based support in Congress for the Administrator's efforts to modernize SBA's systems and outlook. There is broad-based support for the Administrator's goal for the 7(a) loan program - to get SBA out of the loan application approval business altogether and to the assume the role of overseer of the lending institutions.

This hearing will focus on the progress SBA has made, since the July 16, 1998 hearing, in performing and completing the planning needed to serve as the basis for funding the development and implementation of the 7(a) loan program computerized loan monitoring system including the eight planning steps required by the Act.

At this hearing today, we would appreciate your assessment of (1) whether any planning has been completed as of today, (2) the management decisions made as a result of that planning, (3) the planning remaining to be completed, and (4) the management decisions remaining to be made. Further, we would like to know the extent to which SBA has involved the lenders in the planning process. Lastly, does the planning for the system

include maximizing opportunities to reduce needless paperwork, regulatory burden and costs borne by the borrowers, lenders and SBA?

It would be unacceptable for SBA to ignore the law and the will of Congress expressed in Section 233 of the 1997 Small Business Reauthorization Act. It would be unacceptable for SBA to bypass accepted system development standards and essential planning steps. No successful business could omit prudent planning. It is incumbent upon Congress and the U.S. General Accounting Office to see that a federal agency does not engage in wasteful, willy-nilly project management.

In a nutshell, the purpose of this hearing is to hold SBA's feet to the fire to make sure they complete the eight planning steps required by law before the agency spends any taxpayers' money to buy software or hardware for a new automated computer system for monitoring its 7(a) loan portfolio.

Again thank you all for participating in this hearing. And thank you in the audience for attending this hearing.

U.S. SMALL BUSINESS ADMINISTRATION
WASHINGTON, DC 20416

STATEMENT OF

FRED P. HOCHBERG

DEPUTY ADMINISTRATOR

U.S. SMALL BUSINESS ADMINISTRATION

SBA's LOAN MONITORING SYSTEM

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT PROGRAMS & OVERSIGHT

COMMITTEE ON SMALL BUSINESS

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 29, 2000

Good morning, Mr. Chairman and Members of the Subcommittee. Thank you for inviting the U.S. Small Business Administration (SBA) to testify today about our planning for the implementation of our Loan Monitoring System (LMS). My name is Fred P. Hochberg and I am the Deputy Administrator at SBA. Joining me is Kris Marcy, the Chief Operating Officer, Lawrence E. Barrett, the Chief Information Officer, Charles Tansey, Associate Deputy Administrator for Capital Access, and Joe Loddo, the Chief Financial Officer. We are appearing on behalf of SBA Administrator, Aida Alvarez, whose schedule does not permit her being with you today.

Since we last testified on this topic in July 1998, SBA has made significant progress in leveraging our resources through the development of public-private sector lending partnerships and in designing our overall information technology systems. The Loan Monitoring System (LMS), however, remains the core of our modernization initiatives.

By way of background, the Loan Monitoring System is Phase I of a three-phase, multi-year overall systems modernization program. This is the subject of today's hearing. Phase II contains both the core accounting system and the disaster loan system. Phase II will allow us to produce timely financial statements and expedite the disbursement of disaster funds to people who need to start rebuilding their homes and businesses. Phase II is also critical to the LMS because the Agency must account for the loan portfolio in its financial statements and the LMS will service loans made in the disaster program. Phase III will modernize the systems used for the rest of the agency's programs.

We are truly excited by the benefits that this new technology will provide. Here is just a brief outline of some of the benefits that will be derived from the system:

For our lending partners:

- SBA compatibility with our lending partners by enabling seamless reporting, exchange of data, and fee management.
- Decreased risk of imprudent lending by a small group of lenders, thereby freeing resources for prudent lending partners.
- Shorter turnaround times, better service, electronic fund transfers, and simplified data collection.

For SBA:

- SBA personnel will finally have the analytical tools and real-time access to information required for appropriate business decisions.
- Electronic workflow will eliminate much of the paper, which will allow SBA personnel to focus on loan analysis, lender oversight and relationship management.
- Electronic loan files will be accessible "on-line" with appropriate safeguards eliminating the costs and delays involved with transferring paper from office to office.
- More accurate data will make back-end functions such as asset sales due diligence and subsidy rate calculations less onerous.

I want to thank you Mr. Chairman and the Members of the Subcommittee for your past support of our efforts and I ask for your continued assistance and support in the future.

SBA's MISSION

SBA provides capital to a unique niche in America's commercial market. Simply put, our legislative mandate is to serve as a gap lender, to ensure that those small businesses who do not have access to traditional means of capital in the commercial marketplace are able to get the funds necessary to start or grow their business.

FORCES CREATING IMMEDIATE NEED FOR MODERNIZATION OF THE SBA'S KEY PROCESSES AND TECHNOLOGY

There are several important events which are forcing the Agency to prioritize the modernization of our core business and technology practices:

1) **Changes in governance and policy have led to an increased reliance on private sector lenders for delivery of SBA's programs.**
2) **Technological innovation is changing SBA's private sector partners' business practices.**
3) **The lending industry has undergone radical restructuring amid rapid growth and even more unanticipated changes may be on the horizon with the last year's passage of the Gramm-Leach banking law by Congress.**
4) **Declining SBA personnel levels.**
5) **The passage of Clinger-Cohen Act of 1996.**

6) **SBA's financing system does not comply with the posting rules contained in the Standard General Ledger, and SBA's loan accounting system does not adequately capture budgeting data in a manner that facilitates preparation of financial statements and reports.**

7) **The directives set forth in the 1997 SBA Reauthorization Act (PL 105-135).**

PRIVATIZATION OF SBA FUNCTIONS

In the not too distant past, SBA field offices reviewed the creditworthiness of each loan before guaranteeing it, and then serviced and liquidated each loan that went into default. Today, SBA has centralized many loan processing and servicing functions. The Agency's Preferred Lender Program (PLP), SBAExpress, and Premier Certified Lender Program (PCLP) delegates credit decisions and other loan making and servicing responsibilities to its most qualified lenders. SBA relies on the lenders' credit analysis and only reviews PLP and SBAExpress loans for eligibility. SBA also performs only a limited credit review on loans submitted under the LowDoc program. The LowDoc program allows lenders to submit a streamlined application for loans of up to $150,000 and to receive a response from SBA within 36 hours.

In 1999, about 75 percent of all business loans were made by our lending partners with no or limited credit review by SBA. The lenders also service and liquidate those loans. In accordance with the direction of Congress, SBA has also out-sourced 30 percent (or about $1 billion) of disaster home loan servicing. This trend is expected to expand in the future. For instance, in FY 1999, SBA carried out its first asset sale of direct and purchased business loans.

This is the ultimate privatization of SBA's servicing. The sale included 4,060 small business loans and realized $195 million in proceeds, which is $90 million more than the Federal government would have collected had it held the loans to maturity.

As delegation of the loan-making process continues, SBA's exposure on the loan guaranties becomes increasingly subject to the credit policies and actions of the participating lenders. In order to protect the taxpayer's interests, we must have a system that allows us to identify, understand, and respond to their behaviors so we can ensure the long-term viability of SBA's lending programs. The Small Business Reauthorization Act of 1997 also required the SBA to increase its role in lender oversight.

SBA's basic program management and accounting systems were designed 20 years ago for direct loan making and have not kept pace with program delivery or technology. The current system does not readily provide management type information, such as identifying lender behavior that deviates from industry norms or being able to determine the sensitivity of the portfolio to changes in the economy. This information is crucial to overall risk management and SBA's continued ability to prudently deliver access to capital.

Ultimately, the success of the SBA's efforts to leverage private sector resources is contingent on the development and use of a sophisticated lender oversight and loan monitoring system. We will refer to this effort as the Loan Monitoring System (or LMS) which constitutes Phase I of SBA's overall system modernization efforts.

WHAT THE FUTURE HOLDS FOR SBA

The Internet's vast potential as a consumer-banking forum is beginning to be realized. In 1998, 6.9 million households were banking online; and that number is expected to grow to 24.2 million by 2002. Thirty-nine of the nation's 100 largest consumer banks now offer Internet bill payment, up from 17 a year ago.[1] And, Forrester Research projects that 40 billion dollars in loans will be originated online by 2001. These changes are also taking place in business banking and SBA's systems must become compatible with these industry innovations to enable seamless integration of SBA's programs with the internal mechanisms of our lending partners. We must be able to accommodate electronic transactions at the request of our lenders.

Another technological advancement impacting SBA and its business partners is the use of credit scoring. The private sector employs credit scoring to assist in making objective, standardized determinations on front-end risk on consumer loans, and increasingly on business loans. Recently, credit scoring models have increased in sophistication, allowing for a more in-depth, prospective analysis of borrowers who previously would have scored poorly.

By the summer of 2000, SBA will begin using customized credit scoring technology to expedite the decision-making workflow of its LowDoc centers. This approach was identified during the Benchmarks process, following a review of Freddie Mac's systems. Specifically, a loan guaranty request receiving a credit score in the low risk range, that is when the score indicates a high likelihood of repayment, the credit scoring process will replace one of the two

[1] The Industry Standard, May 99, Thompson, Maryann

credit reviews now required for loan approval.

The use of credit scoring must be balanced. SBA will continue to proceed to develop credit scoring methodology tailored to the needs of its clients which can serve as an appropriate evaluation tool.

SIGNIFICANT CHANGES IN THE LENDING ENVIRONMENT

It should be noted that while large, high-volume lenders generate a significant portion of SBA's lending, smaller, less active lenders who tend to serve rural areas and economically disadvantaged areas still need to be served by SBA programs and services. For example, in FY 99, seventy-two percent of our lenders originated five or fewer loans. Continued bipolarization of lending activity between high-volume multi-state lenders and less-active lenders in smaller markets may exacerbate the gaps in lending and make it more difficult for SBA to ensure nationwide access to capital. At the same time that the SBA accommodates multi-state lenders by streamlining operations and processing, it must provide customized service to newer, smaller and more traditional lenders and their borrowers in local markets.

---

[2] www.fanniemae.com, press release 0264,"Automated Underwriting, Credit Scoring and the Internet."

[3] As the credit score technology is customized for SBA terminology and score parameters may change

[4] Booz-Allen&Hamilton Benchmark Report Order No. SBAHQ-98-F-0293

[5] Booz-Allen&Hamilton Benchmark Report Order No. SBAHQ-98-F-0293

DECLINING PERSONNEL LEVELS

All of these changes have occurred while SBA's personnel levels have decreased. At the same time the number of our employees (excluding disaster staff) has decreased over 20%, lending has tripled to where SBA has a portfolio in excess of $50 billion today.

THE EIGHT REQUIREMENTS OF SECTION 233 OF THE SMALL BUSINESS REAUTHORIZATION ACT OF 1997

In February 1997, SBA requested appropriations as part of its FY 1998 budget to begin replacing its outmoded legacy data systems and to make needed improvements in its loan monitoring capabilities. Congress appropriated $8 million for FY 1998, $8 million for FY 1999 and $8 million for FY 2000.

Section 233 of the Small Business Reauthorization Act of 1997 laid out a series of eight planning steps which were to be followed in designing the new loan monitoring system. During the past two years, the Agency has worked closely with your staff, staff of the Full House and Senate Small Business Committees, our appropriators and the General Accounting Office (GAO) in order to carry out these important planning steps.

In total SBA submitted twenty-eight deliverables to GAO for review. Many deliverables were ultimately revised to incorporate GAO's recommendations for improvements. SBA

believes that the work done to fulfill these planning steps have laid the groundwork for a successful loan monitoring system and improved other aspects of the Agency's information technology program. What follows is a summary of our progress on each of the eight planning steps.

1. **Fully defining the system requirements using on-line, automated capabilities to the extent feasible.**

Working with contractor help (Booz-Allen&Hamilton) and a forty-member team of senior SBA staff, SBA identified a number of improvements in our business processes. Requirements were identified for lender management, loan guaranty approval, risk management, portfolio management including asset sales and subsidy rate support, and Treasury cross-servicing. In addition, requirements were identified for data quality and information technology. These requirements are contained in a document entitled "SBA Systems Requirements for the Loan Monitoring System."

2. **Identifying all data inputs and outputs necessary for timely report generation.**

SBA has completed the identification of all data inputs needed for the Loan Monitoring System. First, our contractor Data Networks developed a high level process chart which breaks down the system to three levels of functionality. Using this chart, as well as, the SBA 1995 Information Architecture Report, the draft Information Technology Architecture (ITA) "To Be"

model, the BPR data elements groups, and data elements lists from SBA legacy systems, we documented the required LMS data inputs. Working with SBA staff from the Office of Capital Access, processing and service centers, field offices, and the OCIO, the contractor developed a logical (or conceptual) data model that depicts all of the data elements required as inputs to the LMS.

3. Benchmark loan monitoring business processes and systems against comparable industry practices.

I will detail this later as I describe the system SBA plans to implement as a result of these planning steps.

4. Determine data quality standards and control systems for ensuring information accuracy.

SBA took a two-step approach to completing the planning for ensuring that the LMS collects data that meets the needs of SBA management. First, Data Networks developed a Data Quality Guidance document that sets the goal of quality data in all SBA information systems. This guidance was used by the contractor to develop the Data Quality Management Plan to identify data quality standards and control systems for ensuring information accuracy for the LMS. The Plan identifies the activities SBA will undertake to ensure information accuracy including: development of business, data, and application architectures, physical data base design, data load and migration, testing focusing on data quality, and inspection and data

configuration management during system operation. In addition, SBA also performed an analysis of the data quality issues it faces in its legacy systems. The Data Quality Plan focuses on ensuring that these kinds of quality issues are resolved and do not reoccur in our new system.

5. Identify an acquisition strategy and work increments to completion.

We have completed an acquisition strategy for the Loan Monitoring System and have identified six phases of implementation of the reengineered work processes and associated technology improvements. On December 21, 1999, Administrator Alvarez approved the recommendations of the BPR and the implementation strategy in an SBA policy document entitled "Loan Monitoring System (LMS) Recommendations" following its review by senior SBA officials.

Contracts will be used as management tools and will be structured to motivate contractors to manage the work effectively while satisfying all contract requirements, to identify performance problems early enough to take needed corrective actions

6. Analyze the benefits and costs of alternatives and use to demonstrate the advantage of the final project.

Following finalization of the BPR recommendations, SBA conducted a cost/benefits analysis for implementing the reengineering. The analysis, contained in "The Business Case for the Reengineered Loan Monitoring System," clearly shows that the Loan Monitoring System is cost effective in comparison with the current system as well as major alternatives.

7. Ensure that the proposed information system is consistent with the agency's information architecture.

The SBA has taken steps to ensure the proposed information system is consistent with the agency's information architecture. With EDS Corporation support, the SBA has developed a strategy to reconcile LMS (as well as other technology projects that are underway) with the Enterprise Information Technology Architecture (ITA). The ultimate goal of this strategy is to effectively and efficiently align the use of information technology with strategic business and IT direction, while minimizing the impact of the SBA's evolution towards its target.

As an integral part of the Systems Development Methodology (SDM), phase reviews and checkpoints are identified and planned. SBA will use these checkpoint reviews as a means to verify and ensure compliance to the ITA. Because the LMS is currently in the initiation phase of the project, there are only two elements of the SBA ITA that LMS should be reconciled with, the Business Architecture, and the IT Direction.

8. Estimate the cost to completion through identification of essential cost elements.

SBA has estimated the LMS cost of completion through the identification of essential cost elements. SBA decided to structure the cost elements by SDM life-cycle phases. This approach allowed for focus on specific phases of the project life-cycle to better identify appropriate cost elements by purpose and outputs of each phase of the process. Assumptions

were documented for each cost element. The cost elements were then summarized by life-cycle phase and categorized by type of cost.

BENCHMARK STUDY

As mentioned earlier, I will now go into detail about the results of the benchmark study and subsequent business process reengineering. Our office of the Chief Information Officer (OCIO), on behalf of the Capital Access/Financial Assistance Office, contracted with Booz-Allen &Hamilton to conduct a benchmark study in order to fulfill the requirements of the 1997 SBA Reauthorization Act. The purpose of "benchmarking was to identify the "best practices" of organizations that perform functions similar to those of the SBA.

Booz-Allen&Hamilton emphasized to SBA at the beginning of the benchmark study that some of the organizations examined have had significantly more resources available for the development of their systems and have spent several years in their development.

Booz-Allen&Hamilton also highlighted the fact that *none* of the organizations identified in the benchmark report perform precisely the same function as the SBA. Conventional lenders in the study do not have SBA's mission of providing financing to those who do not have access to credit on reasonable terms. The quasi-governmental entities we studied, like Freddie Mac and Fannie Mae, are also significantly different from SBA because they are involved in housing rather than commercial loans. This is mainly due to our role as a gap lender, which I discussed earlier. Nevertheless, their systems provided good models for the SBA to use in developing the Loan Monitoring System.

Booz-Allen&Hamilton first examined the current processes of the Agency's loan programs to determine where improvements could be made. Their study concentrated on five functions: guaranty procedures, lender oversight, risk management, asset sales, and subsidy rate.

As expected, the study concluded that there are performance gaps in all of the five functional areas. Within the performance gaps, there was one underlying concern that affected each of the five areas, i.e., the inability of capturing and analyzing information which may result in an increased taxpayer's exposure to credit risk. Booz-Allen&Hamilton recommended that systems be developed that will obtain information at loan origination and then automatically and seamlessly transfer the information throughout the organization. The information captured directly from lenders at the inception of a guaranty will form the basis for all other future analysis. Loan performance data should also be gathered from lenders and analyzed to develop an understanding of loan-life behavior. The Risk Management function should use the captured information to determine the optimal underwriting criteria and portfolio exposure. The Lender Oversight function should use the captured information to analyze, and anticipate, lender behavior in order to ensure that lenders are acting in the best interests of the SBA. The Subsidy Rate Calculation function should use the captured information to predict more accurately the future cash flows of loans. The Asset Sales function should use the captured information to determine the optimal value for a portfolio of loans or guaranties. Each function is therefore dependent on receiving accurate, relevant, timely and consistent information on each guaranteed loan.

Commercial lenders and other organizations which exhibit the best practices are those who have systems and processes in place that allow functions to be integrated based on three key concepts: consistency of loan information, relevance of information collected, and the seamless integration of information and business processes. The LMS incorporates these key concepts.

It is important to note that SBA's benchmark efforts are dynamic. SBA continues to benchmark innovative business practices and information technology systems as they become available to ensure that potential business process improvement or commercial-off-the-shelf (COTS) technical solution is considered for its applicability to our Agency.

BUSINESS PROCESS REENGINEERING

SBA's Business Process Reengineering (BPR) project represents an important step in the Agency's modernization planning process. Booz-Allen & Hamilton, Inc. facilitated the BPR effort, with employees of their firm both guiding the work of the BPR teams and recording the teams' ideas. The BPR study was conducted from December 1998 through June 1999 with a forty-member team comprised of a cross section of SBA field and headquarters staff most knowledgeable about small business borrowers and SBA's responsibilities. The team recommended incorporating technology advances that were not even available five years ago. The members were specifically instructed not to be limited to the traditional, nor constrained by current organizational structure.

FEASIBILITY ANALYSIS

After the BPR, SBA followed the guidance of the General Accounting Office's (GAO's) Business Process Reengineering Assessment Guide and conducted a feasibility analysis of the BPR recommendations. The GAO guidance suggested that a feasibility study should balance the feasibility of each recommendation against the projected return on investment for the agency.[6] To this end, a panel of program experts, who were not part of the BPR team, reviewed the 38 major BPR recommendations. Concurrently, the Associate Directors for Capital Access and Field Operations and their staffs along with the Chief Operating Officer analyzed and adjusted the recommendations to better reflect the agency's mission as a "gap lender." Of major concern was ensuring that the new system did not have a negative impact on potential borrowers most in need of assistance and on those lenders not yet ready to move to an all-automated environment. The original recommendations called for complete centralization of loan processing. This approach was *rejected because we could not ensure that the Agency's mission could adequately be served without some degree of local service.* Centralized processing may require a level of standardization that can cut out low-volume and new lenders. The team's other major risk concerns included the following:

- Increased delegation of authority to lenders must be counterbalanced with stronger lender oversight.
- The streamlining of underwriting could reduce the availability of information necessary to

[6] GAO Business Process Reengineering Assessment Guide

assess SBA's potential risk.

- Full centralization of servicing reduces the ability to provide hands-on assistance to borrowers who are viable, but having difficulty. It also reduces the ability to quickly respond to regional needs. One example would be the recent fuel oil crisis in New England.
- Centralization further removes the Agency from local knowledge. Commercial lending is very sensitive to local conditions, requirements of state law and associated litigation. Relations with local lenders, lenders new to SBA's programs, and lenders that specialize in serving new markets cannot be cultivated to the same degree in a highly centralized environment. In addition, training, oversight and market analysis are also more difficult.
- The manner in which a loan is processed and serviced has a direct influence on the kind of loans that are made. To the extent that SBA too closely mirrors the practices of commercial lenders, it runs the risk of reducing the value added to the small business sector.

Ultimately, 30 of the 38 original major recommendations were adopted without change. The remaining eight were adopted with modifications to better meet our legislative mission as a gap lender. SBA will implement the actual recommendations issuing from these deliberations as part of Phase I of LMS development. The general themes of these 38 recommendations are:

- **We will become electronic with our lenders, pushing less paper and leveraging the tools we already have.**
- **We will emphasize quality data and timeliness.**
- **We will meet the need for greater oversight to monitor lenders' strict adherence to data collection and performance standards.**

- **We will consistently enforce policies and regulations.**
- **We will proactively perform risk management.**
- **We will continue with asset sales and will strengthen our ability to do timely and accurate subsidy rate calculations.**

THE ITERATIVE APPROACH TO IMPLEMENTATION

Now I will briefly discuss our approach to implementation of the Loan Monitoring System (LMS). The technical term for the approach we have adopted is a "combination evolutionary incremental project structure." In layman's terms, we refer to our implementation method as the iterative approach.

The incremental or iterative model is characterized by acquisition, development, and deployment of capability through a number of clearly defined system "increments" that can stand on their own. The number, size and phasing of the "increments" for the LMS project were determined by the project team with significant input from SBA field representatives. Requirements for the LMS are documented both in Joint Financial Management Implementation Program (JFMIP) loan systems requirements and in the LMS Systems Requirements. The approach is evolutionary in that SBA will make use of prototypes whose full functionality may evolve over time. Testing a system built in smaller modules is also *less risky*. If something doesn't work as expected it can be fixed fairly quickly and less expensively.

The first iteration of the new LMS initially will have the greatest impact on the PLP and SBA LowDoc loan processing. The anticipated completion date for Iteration One is Summer

2000. In Iteration One:

- **We will establish a set of core data elements that we will collect on all loans.**

  The core set of data elements that have been identified is needed both for guaranty approval and throughout the life of the loan, including for risk management and lender oversight. Most of the best practice organizations reviewed during the benchmark practice standardized data collection followed by seamless and consistent use of the information for risk management. Freddie Mac uses its Loan Prospector® system to capture standard information directly from the lenders and move the information into the corporate computers. Bank of America uses the Merlin® system to capture standard information at its branch level, then uses the information to underwrite the loan and then transfers the information into the corporate loan accounting system.

- **The Internet will be the standard medium for submitting all applications.**

  Ultimately, SBA will fully leverage the Internet as a backbone for data submission. Freddie Mac has realized significant benefits by establishing their Loan Prospector® Internet based system as its standard medium for application data submission. In fact, Freddie Mac's participating lenders report that using Loan Prospector already is saving them $300 to $650 per loan.[7]

- **PLP, SBAExpress, PCLP, SBALowDoc, and Community Express ultimately will be submitted electronically.**

[7] Freddie Mac's Guide To Automated Underwriting, Chapter 2, p. 3

SBA will encourage electronic transfer of guaranty requests and servicing actions. However, to ensure access to SBA's programs by all small businesses, SBA will not turn down any transaction because of a lender's lack of electronic capability. We fully expect that, over time, lenders will move towards electronic-commerce and this issue will fade, however we intend to do what it takes to get capital to deserving small businesses. In the short term, SBA plans on accommodating lenders' varying levels of technical infrastructure and competency by establishing several automated data submission tracks. For example, highly automated lenders may use a file transfer via the Internet, whereas a less sophisticated lender may use Optical Character Recognition forms to fax an application to SBA. However, SBA will not turn a paper application away.

- **Establishment of performance standards against which lenders will be reviewed .**

  Lender performance standards will be established by a centralized lender oversight group. This is similar to what occurred at Freddie Mac and the Farm Credit Administration (FCA), where "best practice" lender performance standards were established by centralized lender groups.

- **Lenders will be held responsible for submitting complete and accurate information on loan applications.**

  This is ensured through a processing system that immediately screens out incomplete applications and identifies incomplete or invalid entries. The appropriate SBA field office will be notified of repeated deficiencies and rejections by lender so that they can undertake training.

- **Authority to make eligibility decision will be delegated to PLP lenders.**

  SBA will allow PLP lenders to sign an eligibility checklist and/or use an Internet automated eligibility tool and retain the results in their file as a substitute for the Agency's eligibility determination. Lenders will be held accountable for eligibility determinations as part of the lender review process. Upon full implementation, we expect PLP loans to be processed without SBA staff being involved in the processing. *However, SBA will have staff available to consult on complex eligibility issues.*

ITERATIONS 2-6

The following is a summary of the highlights of iterations 2-6:

Iteration 2: We will expand the electronic application process to include regular 7(a) and 504 loan programs. We will also test electronic loan files, digital signatures, and loan risk determinants.

- This will minimize paper flowing between SBA and its lenders and within SBA.
- Loan risk determinants will help SBA assess the risks associated with new loans and understand how the risks change over time.

Iteration 3: We will continue to automate the internal work flow and develop on-line reports for SBA staff and management.

- SBA staff and managers will have more accurate and timely information to make decisions.

Iteration 4: We will add proactive risk management tools, a new loan servicing system, and an on-line system for lenders to update loan status information.

- It will be easier for lenders to provide loan data to SBA.
- SBA will have analysis tools to perform proactive risk management of the portfolio.

Iteration 5: The system will include lender performance tracking and oversight.

- The system will provide lender performance information to our lender oversight function.

Iteration 6: We will complete the system with modules to support liquidation and litigation activities, enforcement of lender performance standards, and streamlined asset sales and subsidy rate calculations.

- The cost of asset sales will be reduced.
- Subsidy rate estimates will be more automated and require less data cleansing freeing resources to do more analysis.

OVERALL AGENCY COMMITMENT

SBA believes it has addressed most of GAO's recommendations regarding the management of this project that are not specifically referenced in the eight planning steps, but critical to Clinger Cohen based planning. Early in the process, GAO representatives suggested that SBA's modernization efforts and more specifically the Loan Monitoring System Project, were devoid of an official "champion." Since the last hearing on this subject in July 1998, SBA has designated Chief Operating Officer, Kris Marcy, as the senior-level official with overall responsibility, authority, and accountability for managing and coordinating the Agency's modernization projects. She works closely with our Chief Information Officer, Larry Barrett and

[4] Freddie Mac's Guide To Automated Underwriting, Chapter 2, p. 3

our Chief Financial Officer Joe Loddo to ensure that the Clinger-Cohen mandates have been met and that critical tasks are completed on time and within budget. She also works closely with the Associate Deputy Administrator for Capital Access Charles Tansey and the Associate Administrator for Field Operations Robert Baskin to ensure that our program offices are well served by data improvements. We also want to ensure that the staff who will implement the LMS in the field are involved fully during the early stages of the project. In addition, Ms. Marcy and our program staff have held regular, in-depth briefings with GAO and your staff in November 1998, May and October 1999, to keep this Subcommittee fully abreast of our progress. Also, the Business Technology Investment Council, the SBA's Information Technology Investment process, has endorsed the Loan Monitoring System Project. This Council reviews, controls and evaluates all SBA systems projects.

Most importantly, SBA has established dynamic feedback mechanisms to analyze the concerns of its internal and external stakeholders and to proactively identify and define potential barriers of the modernization effort. Some examples include:

- In December of 1999, the agency began a series of ten regional training sessions to educate key field staff (District Directors, Deputy District Directors, Assistant District Directors for Economic Development) about business and system changes.
- The LMS Project team regularly briefs its primary 7(a) and 504 trade groups, the National Association of Government Guaranteed Lenders (NAGGL) and the National Association of Development Companies (NADCO), on proposed process and system changes. In addition, project leadership conducts monthly meetings with NAGGL and NADCO technical advisory

representatives.

- An Internet (www.sba.gov/banking/modernization.html) and Intranet site is dedicated to the communication of modernization related issues. The sites include various two-way communication mechanisms for dynamic exchange of ideas between internal and external stakeholders.

NEXT STEPS

We are confident that we have carefully undertaken the planning necessary to ensure successful implementation. We are mindful of the mistakes that have caused other organizations to stumble. Using the incremental development approach, we will increase the likelihood of success by developing, testing, and implementing manageable pieces of the system. While we are mindful of possible risks, we are also aware of the greater risk of not proceeding. All of our planning has illuminated the exposure we currently face. As stewards of federal resources, our failure to proceed would be irresponsible and imprudent.

Thank you for inviting SBA to discuss with you the automated Loan Monitoring System and again we appreciate your continued support for this effort. We will be happy to answer any questions you might have.

The National Association of
Government Guaranteed
Lenders, Inc.

STATEMENT OF

ANTHONY R. WILKINSON

PRESIDENT
AND
CHIEF EXECUTIVE OFFICER

OF THE

NATIONAL ASSOCIATION OF
GOVERNMENT GUARANTEED LENDERS, INC.

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT PROGRAMS AND OVERSIGHT

COMMITTEE ON SMALL BUSINESS

UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 29, 2000

Post Office Box 332 • Stillwater, Oklahoma 74076 • 405/377-4022 • FAX 405/377-3931

Good morning Mr. Chairman and members of the Committee. My name is Tony Wilkinson and I am President and Chief Executive Officer of the National Association of Government Guaranteed Lenders, Inc. or NAGGL. NAGGL represents nearly 700 lenders and other program participants who cumulatively make approximately 80 percent of the 7(a) loans guaranteed by the Small Business Administration. We thank you for holding this hearing today and for requesting our input on SBA's automation efforts.

Period of Growth

Over the last decade, the SBA 7(a) loan program has experienced tremendous growth. What once was a $1.5 billion loan program is now a $10 billion-plus program. Last fiscal year alone some 50,000 SBA 7(a) loans were made. In the early part of the 1990's, only a small portion of 7(a) loans were processed using the preferred lenders program (PLP), meaning an SBA representative manually processed most 7(a) loans. But with increasing credit demands of small business, NAGGL questioned SBA's mode of operation. With shrinking resources, the SBA needed to rely more on the private sector to deliver their programs. The SBA needed to manage lenders relationships rather than manage individual credit. And the SBA needed to upgrade their management information systems as their current system is over 20 years old and has not kept pace with technology.

As we all know, this transformation is well under way at SBA. Last year, approximately 75% of all 7(a) loans are processed under the PLP program or other limited review procedures. The SBA is shifting 7(a) program resources so that the Agency acts more like a regulator, focusing on lender oversight. The SBA is now better leveraging private sector resources, providing greater access to capital to small business, and doing so with fewer employees.

Loan Monitoring System

An integral part of SBA's success will be the development of a new loan monitoring system. This is no easy task. The SBA must be able to deal with both large multi-district

lenders as well as community banks serving limited geographical areas. The needs of these lenders are very different and SBA should make sure that it meets the needs of both extremes and every lender in the middle. The SBA must gather sufficient data to manage its loan portfolio in a responsible manner, while not creating a reporting burden on either borrower or lender.

NAGGL thanks the SBA for the on-going dialogue with our automation committee. We hope this continues. This will be critical as SBA nears the stage of refinement of their proposed systems. We request the opportunity to provide feedback as to whether the system will actually work. We anxiously await the set of specifications - or data file elements – to be published soon by SBA. This is what lenders need to determine their ability to comply.

NAGGL concurs that the Internet should be the standard medium for submitting loan applications and servicing actions. Reliance on the automated flow of information should create efficiencies both with the lender and SBA. We also appreciate SBA's willingness to work lenders who are not technologically capable by agreeing to continue to accept applications by paper.

NAGGL hopes that the SBA is having or will have dialogue with current SBA contractors to make sure that they can specifically integrate their computer systems with what the SBA is planning. Hopefully this will maximize results and there will be no duplication of efforts.

Lender Performance Standards

As equally important as the process for the collection of data is the establishment of performance standards by which lenders will be reviewed. The SBA has recently established the Office of Lender Oversight and it is our understanding that development of performance standards is one of high priority. NAGGL has long said that the SBA needed to be in the business of lender oversight. We hope to work with the SBA to

develop performance standards that are appropriate to protect SBA's interests but also reasonable, fair and focused on compliance with SBA rules.

Subsidy Rate Impact

One of the stated uses of the data collected in the new Loan Monitoring System will be to "predict more accurately the future cash flow of loans." NAGGL hopes this actually happens. For the last several years, the Administration has materially over-estimated the cost of the 7(a) program by using a default estimate that is much higher than actual defaults. This means that borrowers are being charged fess much higher than necessary. In just the last four years, the Office of Management (OMB), per the fiscal year 2001 budget request, now says they overestimated the cost of the 7(a) program by a total of **$1 BILLION**. Compared to the requested 7(a) program appropriation for FY 2001 of only $142.6 million, this is a serious problem.

But even though OMB has reported they overestimated the cost of the program in the past, primarily due to excessive default estimates, they did not materially change the default estimate for FY 2001. OMB is still using a default estimate that we believe is more than 40% higher than necessary. A 40% decline in the default estimate in the subsidy model would mean a 7(a) program subsidy rate of approximately zero!

NAGGL would appreciate any help this Committee could provide in helping obtain a more reasonable and fair subsidy rate calculation for the 7(a) program.

Thank you for the opportunity to appear today.

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Government Programs and Oversight, Committee on Small Business, House of Representatives

For Release on Delivery
Expected at
10:00 a.m. EST
Tuesday,
February 29, 2000

SBA LOAN MONITORING SYSTEM

Substantial Progress Yet Key Risks and Challenges Remain

Statement of Joel C. Willemssen
Director, Civil Agencies Information Systems
Accounting and Information Management Division

GAO/T-AIMD-00-113

Mr. Chairman and Members of the Subcommittee:

Thank you for inviting us to discuss the progress of the Small Business Administration (SBA) in performing the planning actions for its loan monitoring system, as mandated by the Small Business Reauthorization Act of 1997. After providing brief background information, my testimony today will discuss SBA's progress in completing the mandated actions, our evaluation of SBA's products completed thus far, the processes used to develop these products and manage key activities, and actions the agency needs to take to manage risks.

SBA has made substantial progress in completing the eight mandated planning actions, but must still complete work for some actions and implement key functions to effectively manage the development of the loan monitoring system. SBA has benchmarked its business processes against those of leading organizations and has conducted a reengineering study to identify and select new processes to improve its operations. Using the results of these efforts, SBA has also started identifying the data needed for the proposed loan monitoring system, defining data quality standards, developing the information architecture, determining an acquisition strategy, defining systems requirements, and estimating the costs to complete the project. SBA has reported that all of the eight mandated planning actions are complete, except for two concerning the information architecture and systems requirements.

Our analyses of SBA products for the planning actions have shown that the agency has made substantial progress. At the same time, some of the products lack one or more important elements, and there are critical steps that SBA has not performed. Several key functions—such

as configuration management, quality assurance, and system security—need to be established and implemented to effectively manage the project.

Before beginning systems design and development, SBA will need to complete key planning actions—such as performing benefit and cost analyses of business process and system alternatives—for the mandated planning actions. It should also implement critical project management controls—such as those needed to ensure that system design addresses the security challenge posed by Internet-based access. Actions will be needed in such areas as these if SBA is to effectively manage the risks it will encounter in the systems development process.

In commenting on a draft of this testimony, the deputy administrator and other SBA officials told us that they recognize the benefit of the actions we suggest to improve project management. However, they said, the risks from not fully completing such actions before system development should be weighed against the risks and opportunity costs associated with delaying the implementation of a system that would help oversee SBA's guaranteed loan portfolio. They added that the first system increment they plan to develop will assist them in further defining the requirements for the entire system, and therefore they need to proceed with it expeditiously.

BACKGROUND

SBA's need to monitor the activities of lenders who help deliver its programs has increased significantly in recent years. Annual loan approvals for the 7(a) General Business Loan Guarantee Program and the section 504 Certified Development Company Debenture Program have almost doubled since 1992, and the loan portfolio for all its programs now exceeds $40

billion. During that same time, SBA has decreased its staff by 20 percent and shifted to lenders the responsibility for key loan origination, servicing, and liquidation functions. Lenders now originate about 75 percent of new loans with little or no involvement by SBA in the eligibility and credit approval processes.

To enhance its capabilities for loan and lender monitoring, SBA has proposed improvements to its automated systems, lender oversight, and risk management infrastructure. The purpose of SBA's proposed loan monitoring system is to use technology and new processes to manage its loan portfolios, identify and effectively mitigate risks incurred through loans guaranteed by SBA, implement oversight of internal and external operations, and calculate subsidy rates.

After reviewing SBA's basis for this request, we reported in June 1997 that the agency had not undertaken the essential planning needed to develop the proposed loan monitoring system.[1] The Congress subsequently enacted provisions in the Small Business Reauthorization Act of 1997 that required the SBA Administrator to perform and complete eight planning actions to serve as the basis for funding the development and implementation of the computerized loan monitoring system. The act also required SBA to report by June 2, 1998, on its progress in completing the planning actions.

[1]*Small Business Administration: Better Planning and Controls Needed For Information Systems* (GAO/AIMD-97-94, June 27, 1997).

As required by the act, in June 1998 we commented on SBA's report.[2] We reported that while SBA had formed a team for the loan monitoring system in December 1997, it had not yet completed any of the eight mandated actions. SBA's report included a project plan, laying out its approach for addressing these actions. Work on the first of the required planning actions was begun in May 1998 and, according to the project plan, SBA was to complete work on the last of the eight mandated actions in August 1999.

In July 1998 we testified that SBA's project plan delineated the project's goals and objectives, resource requirements, quality standards and control systems, assumptions, methodologies, work breakdown structure with timetable for completion of tasks, and estimated costs.[3] The plan estimated that a staff of 18 would be needed for the first phase of the project, which was to address the eight mandated planning actions, and scheduled completion of the mandated actions by the end of August 1999.

While development of the project plan was a good start, we also testified that SBA faced formidable technical and management challenges and risks in executing the plan, including

- establishing software project management capability while undertaking its largest information technology project ever;

[2]The act required us to evaluate and report on SBA's compliance within 28 days of receipt of SBA's report. Accordingly, we issued *Small Business Administration: Mandated Planning for Loan Monitoring System Is Not Complete* (GAO/AIMD-98-214R, June 30, 1998).
[3]*Small Business Administration: Planning for Loan Monitoring System Has Many Positive Features But Still Carries Implementation Challenges* (GAO/T-AIMD-98-233, July 16, 1998).

- using methodologies and practices for the first time while conducting a large, complex project; and
- implementing the loan monitoring system without having an information technology architecture in place.

SBA acknowledged these challenges and committed to providing the loan monitoring system project with the necessary management support.

To perform the planning for the loan monitoring system and conduct related modernization activities, SBA was appropriated $8 million annually for fiscal years 1998, 1999, and 2000. According to loan monitoring system project data, SBA used about $1 million in fiscal year 1998 and $0.7 million in fiscal year 1999. For fiscal year 2000, SBA plans to use about $2 million for contractor project support, SBA staff, and travel costs; and about $8.5 million for infrastructure acquisition and system development activities.

OBJECTIVE, SCOPE, AND METHODOLOGY

As you requested, our overall objective was to evaluate SBA's efforts to complete actions required by the Small Business Reauthorization Act of 1997 in accordance with required and generally accepted systems development practices.

We conducted our work at SBA's headquarters in Washington, D.C., from August 1999 through February 2000, in accordance with generally accepted government auditing standards. In our analyses of SBA's products for the mandated actions, we used the methodologies and criteria that SBA officials said they used in performing their work and preparing the products, as well as

guidance issued by the Office of Management and Budget, the General Services Administration, the Institute of Electrical and Electronics Engineers, Inc. (IEEE), and our office that are applicable to the mandated planning actions. Our analyses of the products were performed to assess the structure, general content, and processes used in the planning actions. Detailed analyses could not be performed on all SBA products because many were only recently provided to us and time constraints precluded an opportunity to discuss these products and the processes used to produce them with cognizant SBA officials. We provided a copy of our draft testimony to SBA officials; we received comments from them, and made changes as appropriate.

SBA HAS MADE SUBSTAINTIAL PROGRESS IN COMPLETING MANDATED ACTIONS

SBA has completed 17 products for the eight mandated actions and has prepared 3 additional draft products. Table 1 summarizes the status of SBA's products for the eight mandated actions.

Table 1: Status of Products for Mandated Actions as Reported by SBA, as of February 23, 2000.

Mandated Action	SBA Product	Status of Product
Benchmark loan monitoring business processes and systems against comparable industry processes and, if appropriate, simplify or redefine work processes based on these benchmarks	Benchmark study	Final
	Business process reengineering study	Final
	Feasibility analysis of recommendations	Final
	Analysis of "as is" baseline cost and time	Final
	Concept of operations	Final
	Implementation strategy	Final
Analyze the benefits and costs of alternatives and use them to demonstrate the advantages of final project	Business case for reengineering	Final
Ensure that proposed information system is consistent with agency's information architecture	"As is" information technology architecture	Final
	Technology policy statement	Final
	Enterprise information technology architecture report	Draft
	Gap analysis, migration strategy, and transition plan	Draft
	Plan to synchronize loan monitoring system with information technology architecture	Final
Identify all data inputs and outputs necessary for timely report generation	Needs statement (logical data model)	Final
Determine data quality standards and control systems for ensuring information accuracy	Data quality guidance	Final
	Data quality issues	Final
	Data quality management plan	Final
Fully define the requirements for the system that uses on-line, automated capabilities to the extent feasible	Statement of need for the loan monitoring system	Final
	Systems requirements	Draft
Identify acquisition strategy and work increments to completion	Acquisition strategy	Final
Estimate cost to system completion, identifying essential cost elements	Needs statement (total cost to completion)	Final

SBA officials advised us on February 23 that they expected to complete the remaining actions by March 2000 and then proceed to design and develop the first increment of the proposed system.

ACTIONS STILL NEEDED FOR KEY ITEMS

Our analyses of SBA products for the planning actions reveal that the agency has made substantial progress. At the same time, SBA had not completed some critical steps in preparing the products, and key products did not contain one or more important elements. For many of these missing or incomplete items, SBA plans to contract for their completion.

Benchmarking and Business Process Reengineering Are Complete Except for Costs and Performance Measurement Data, Analysis of Alternatives, and Implementation Plans

SBA conducted a benchmark study and reported its results in December 1998. Benchmarking is the comparison of core process performance with other components of the agency or organization (internal benchmarking) and/or with leading agencies or organizations (external benchmarking). Best practices include the processes, practices, and systems that perform exceptionally well in specific areas of public and private organizations. Benchmarking provides a means of establishing a compelling business case for change. It should identify more efficient and effective processes for achieving intended results, and suggest goals for program output, product and service quality, and process improvement.

SBA's contractor used a seven-step benchmarking process to evaluate SBA business gaps with similar organizations for five loan management functions. The functions benchmarked were risk management, lender oversight, guaranty procedures, subsidy rate calculation, and asset sales. These functions were benchmarked against the practices of 11 federal and private-sector organizations.

The benchmark report identified standard industry or "good" practices and showed a significant gap between SBA and benchmark partners' practices for each of the management functions. The report also contained suggestions that senior management needed to "buy in" to the reengineering process, communications plans needed to be developed, systems requirements needed to be preliminarily defined, and training plans needed to be examined.

In evaluating SBA's benchmark effort, in May 1999[4] we reported that it was an important first step in SBA's actions to develop a loan monitoring system. In general, the benchmarking methods used were consistent with accepted practices and the benchmarking methodology was followed at a high level. However, the study had a number of weaknesses, the most significant being that it did not produce cost and performance measurement data for SBA and the benchmark partners' processes. SBA agreed with our analysis and stated that it planned to collect additional benchmarking information during its business process reengineering activities.

---

[4]*Small Business Administration: Enhancements Needed for Loan Monitoring System Benchmark Study* (GAO/AIMD-99-165, May 14, 1999).

Because the benchmark study identified wide gaps between SBA's business processes and the best practices of the benchmark partners' practices for each of the management functions, SBA decided to pursue business process reengineering for each of the five SBA areas that were included in the study. Business process reengineering is an approach for redesigning the way work is done to better support the organization's mission and reduce costs. Reengineering identifies, analyzes, and redesigns an organization's core business processes with the aim of achieving dramatic improvement in critical performance measures such as cost, quality, service, and speed.

The purpose of SBA's business process reengineering (BPR) study was to analyze the current business practices within five functional areas of the organization, and develop new, more effective processes, supported by modernized, state of the art, information technology systems. The five functional areas addressed in the study were the following:

Guaranty Procedures encompass the full life cycle of a loan, from application through payment in full or liquidation, with three major subprocesses:

- Processing: encompasses application, approval, and closing
- Servicing: includes all loan actions handled through payment in full
- Liquidation: includes the process of recovering value from defaulted loans

Lender Oversight is composed of three main functions: (1) communicating to lenders about policies, procedures, and standards of performance; (2) monitoring of lender performance; and (3) taking enforcement action when lender behavior and/or performance deviate from accepted standards.

Risk Management is the process by which SBA monitors its loan portfolio, tracks lenders and borrows and oversees the management of the portfolio to keep losses to an acceptable level.

Subsidy Rate is an estimate of the subsidy cost of SBA's guaranteed and direct loan programs as a percentage of the total level of commitment.

Asset Sales is composed of the processes used to sell SBA loan assets, including direct loans and repurchased guaranteed loans, to private investors.

The SBA BPR team, with facilitation support from contractor staff, analyzed the best practices of the industry and made recommendations for SBA's systems modernization primarily from the standpoint of maximizing efficiency with the highest degree of automation. As a result of this analysis, the BPR report contained 38 recommendations for new elements or characteristics for SBA's business processes. A few of the more significant recommendations were that SBA's new business processes include

- one set of core data elements for all loan programs, and one standard electronic channel for submitting all applications;
- centralized processing of all guaranty applications;
- lenders' ability to directly access the SBA system to submit a servicing action request or report a unilateral action;
- lenders, direct borrowers, and designated SBA personnel being able to view the real-time status of all loans;
- liquidations being centralized in the servicing centers to achieve economies of scale in labor and technology;

- continuous capturing of lender performance information and electronic analysis for early warning of potential changes in lender performance; and
- performance information collected through the new lender monitoring system and lender reviews providing the necessary base of information to facilitate informed decisionmaking.

To decide which of the recommendations would be adopted in whole or in part, SBA formed a team that analyzed the risks and barriers associated with their implementation. Based on this analysis, the SBA Administrator fully adopted 30 of the 38 recommendations and adopted the remaining eight with modifications. For example, the recommendation to centralize the processing of all applications was modified to centralize the processing for programs that represent about 75 percent of all guaranteed loans.

SBA's contractor followed a methodology that conforms with generally accepted practices. However, as acknowledged in the report, key cost and performance measurement data—needed to compare and analyze proposed processes against current—were not collected during the BPR study. According to generally accepted practices, a performance-based and risk-adjusted benefit and cost analysis of alternatives being considered for each business process is needed to support the final selection of processes to implement.[5] Accordingly, the BPR report recommended that SBA perform an activity-based cost analysis to provide critical data in evaluating current practices. SBA officials subsequently told us that they would produce a business case that would support their selection of new business processes. SBA did prepare this business case but it did

[5]The generally accepted BPR practices cited here are taken from our *Business Process Reengineering Assessment Guide* (GAO/AIMD-10.1.15, April 1997).

not include benefit and cost analyses of alternatives being considered for each business process. Without analyzing benefits and costs, SBA increases the risk that the most effective and efficient business processes will not be selected.

SBA also has not yet developed an implementation plan for the new business processes as required by generally accepted BPR practices. It developed an overall strategy for implementing the new business processes, but did not develop a detailed plan that lays out the critical elements and milestones for implementing them. SBA should consider formulating such a plan before it starts developing the first segment of the new system to ensure that the development and implementation of supporting information systems will be synchronized with the implementation of new business processes.

Loan Monitoring System Is Intended to Provide Electronic Data Collection and Ready Access to a Comprehensive Data Repository

Based on the results of its BPR study, SBA has developed a general description of the new loan monitoring system. The system is to be used by program managers and staff in headquarters, loan processing and service centers, field offices, financial operations, lenders, and external service providers under contract to perform specific portfolio support tasks. The system is expected to be "on-line to all users around the clock." Internally, SBA staff are to have all necessary data available through a loan system that provides access to records from anywhere in the agency, while externally the system is expected to allow lenders to view their own portfolios.

SBA plans to have the loan monitoring system include a "virtual private network" using high-speed communications based on the Internet and dial-up access for smaller lenders, a security system that requires prior identification and approval of users, and high-level encryption of all messages. Because the Internet is a public network, SBA states that it will require authentication of lenders and SBA staff as they try to initiate access to the system.

In addition to the network, the system is expected to integrate a secure Web site and a technologically advanced system of data, applications, and processes. Requests for loan guarantees are to be submitted electronically, either through a formatted file transfer or on-line entry into the system. The loan monitoring system is also expected to have a comprehensive central data repository to support early warning systems, exception reporting, management reporting, decision support, ad hoc reporting, operational reporting, and financial management reconciliation. The central data repository is also considered to be the key to providing early warning systems for lender oversight and risk management functions.

SBA has decided to design and develop the loan monitoring system in increments. According to the agency, the first increment will include the establishment of a standard set of data elements for loan guarantee applications and the electronic processing of applications for part of its loan guarantee programs. However, SBA has not yet provided us with key documents related to this, such as a description of the system design, documentation on the make or buy decision, proposed acceptance criteria for contract deliverables, and project plans.

Benefit-cost Analyses Have
Not Yet Been Performed

A benefit-cost analysis is a generally accepted method for comparison of alternative means of meeting a specific objective. In its simplest form, benefit-cost analyses should identify alternatives, determine the benefits and costs of each alternative, and recommend the most cost-effective alternative.

SBA's business case analysis[6] describes the current system, discusses proposed system changes, identifies alternatives for the proposed loan monitoring system, and presents a benefit-cost analysis showing that the benefits associated with the new loan monitoring system are greater that the increases in costs for investment, maintenance, ongoing operations, and related items. SBA estimated that the new system would produce, by the end of fiscal year 2006, cumulative cash savings of $147 million. In its analysis, SBA considered—but dismissed—alternatives such as the privatization and outsourcing of loan monitoring functions to the private sector, noting that "SBA already has accomplished most of what can be done in terms of privatization."

SBA considered five system alternatives. It concluded that two of the alternatives—continued use of the current system and making improvements to the current system—were not viable because the current system is completely outmoded in both functionality and technical design. SBA noted that the remaining three alternatives—using standard commercial-off-the-shelf

[6]*The Business Case for the Reengineered Loan Monitoring System*, LMS.V1.1.006, February 2000.

(COTS) software, standard COTS software with custom-made software, and custom-made software alone—will be analyzed at a later point.

Before beginning system design, SBA should perform benefit-cost analyses of all identified alternatives, determine the benefits and costs of each alternative, evaluate alternatives by comparing their benefits and costs, and select the best alternative for implementation. This will increase the probability that SBA will obtain a system that meets its needs at the lowest cost.

SBA's Information Architecture Is Incomplete

An information technology architecture is a blueprint—consisting of logical and technical components—to guide and constrain the development and evolution of a collection of related systems. At the logical level, the architecture provides a high-level description of an organization's mission, the business functions being performed and the relationships among the functions, the information needed to perform the functions, and the flow of information among functions. At the technical level, the architecture provides the rules and standards needed to ensure that the interrelated systems are built to be interoperable and maintainable. These include specifications of critical aspects of component systems' hardware, software, communication, data, security, and performance characteristics.

SBA has analyzed and documented[7] its existing architecture, defined the future—or target—architecture,[8] and analyzed the gaps between the two. The gap analysis[9] forms the basis for development of a migration strategy to move from the current systems to the new system. However, SBA has not fully documented the current systems in the existing architecture, and has not completed its target information technology architecture.

To deal with the incomplete architecture, SBA has developed an approach[10] to maintaining consistency between the SBA information technology architecture and proposed loan monitoring system. This approach—which requires that the system under construction be mapped to the partially defined target architecture—increases the risk that the loan monitoring system would not be seamlessly integrated with the SBA target architecture. To address this increased risk, before beginning system design SBA should consider developing and including the rules and standards needed to ensure that the interrelated systems are built to be interoperable and maintainable in its information technology architecture. These include specifications of critical aspects of component systems' hardware, software, communication, data, security, and performance characteristics.

---

[7] *SBA Existing Information Technology Review, Capability, and Cost Analysis*, Version 1.3, November 9, 1998.
[8] *SBA Information Technology Architecture* (draft), Final Version 1.0, October 1999.
[9] *SBA Target ITA Gap Analysis Assessment and Action/Migration Pla*n (undated draft).
[10] *SBA Plan to Reconcile On-going Loan Monitoring System Development with In-process Information Technology Architecture Development*, September 1999.

Data Inputs and Outputs Are Necessary for Timely Report Generation

Requirements definition begins with high-level requirements and ends with detailed requirements prior to system design. High-level requirements for reports need to be consistent, and validated to a level of detail sufficient for defining acceptance criteria. System outputs, which consist of reports and files to satisfy the organization's information needs, must be precisely defined prior to design. The inputs needed to produce these specific files, and reports are then defined in detail.

SBA identified a sample of current reports, including reports now being produced by local systems and several reports being produced by the mainframe system, but has not identified high-level requirements for all internal reports. Before initiating system design for each increment, SBA should consider identifying the high-level requirements for all internal reports. In addition, it should define detailed input and output data elements necessary for the timely generation of reports.

Data Quality Standards Still Need Schedule, Resource Allocation, and Business Process Measures

Plans for improving data quality should include the definition of data quality standards, the development of quality measures, and the assessment impact of inaccurate data on business units. The plan for improving data quality should also have a schedule of activities and resources that are identified and allocated.

SBA developed a data quality plan and a conceptual data model that includes data quality information. The data quality plan is a strategy paper and, as such, provides a framework for pursuing data quality goals and contains guidelines for developing and maintaining data quality. For example, it discusses data migration actions to cleanse data in current systems. However, it does not identify the business priorities with respect to near-term and long-term requirements for data quality improvement, or provide a schedule of planned actions to improve data quality.

Before beginning design, SBA should consider completing the definition of specific data quality standards, developing a schedule of planned actions to improve data quality in the current systems, and implementing data quality measures for the new loan monitoring system.

Some System Requirements Are Yet To Be Defined

In general, industry and federal practices for systems requirements include system life expectancy; functions and capabilities of the system; business, organizational, and user requirements; computer resource requirements; design constraints; security requirements; operations and maintenance requirements; human-factors engineering requirements; and compliance standards and procedures. The systems requirements should be documented and specify the methods used to ensure that each requirement has been met. It is essential for a requirement to have characteristics that can be verified and assessed throughout the system development life cycle. Methods of verification include inspection, testing, demonstration, and

analysis. All practices involving the creation, changing, or verification of requirements must maintain requirements traceability.[11]

SBA has drafted a systems requirements document that defines requirements for each function in the loan monitoring system, cross-references data bases to loan monitoring system business processes, identifies some of the reports by user and purpose, and includes sections required by the SBA methodology. However, some areas of systems requirements are not complete. For example, the systems requirements document does not specify capacity and performance requirements. Accordingly, before proceeding with system development, SBA should define its system capacity and performance requirements.

Acquisition Strategy Awaits Final Selection of Implementation Alternative

An acquisition strategy allocates risk between the government and contractor, effectively uses competition, ties contract payments to accomplishments, and takes maximum advantage of commercial technology. SBA's acquisition strategy explains the approach for developing the loan monitoring system, identifies project increments, and establishes a risk management approach. In line with the model just described, it allocates risk between the government and the contractor, uses competition, ties contract payments to accomplishments, and takes maximum advantage of commercial technology.

[11]A requirement is traceable if its origin is clear and if it facilitates the referencing of each requirement in future development .

In addition, SBA has taken action to mitigate acquisition risk, by selecting an incremental approach to systems development. Under this approach, cost and schedule risks will be managed by revisiting cost, schedule, and project objectives after the first increment. For each business function, SBA has identified whether automated solutions are available from vendors or government sources, whether business functions can be outsourced, and whether business functions can be developed as customized applications. However, in documenting this information, SBA does not identify sources for each approach, nor does it explain why it believes that 40 percent of the functions must be custom-developed and therefore cannot be outsourced or purchased. Because the risk and cost generally increase as the proportion of customized components increases, it is important that SBA have a sound, justified basis explaining its rationale for this.

Cost to Completion Substantially Set

SBA has substantially complied with this requirement. In documenting its compliance with the requirement to estimate the cost to completion, SBA provided us with its cost-to-completion document. The cost estimate was derived from its business case analysis.

Table 2: Loan Monitoring System Estimated Cost to Completion ($000)

Cost Element	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	Total
Project startup	$ 375		$ 300			$ 675
Initiate project	150	$650	1,160	$ 950	$ 600	3,510
Definition	325	50	150			525
System design	150		350			500
Build system: Data scrub, Integrator, IV&V			1,150	1,200	650	3,000
Iteration 1			843			843
Iteration 2			2,468	800	250	3,518
Iteration 3			93	675		768
Iteration 4			928	1,930	200	3,058
Iteration 5			218	970		1,188
Iteration 6			898	1,530	700	3,128
Data migration			950	1,150	200	2,300
Infrastructure			950	1,900	1,100	3,950
Evaluate			84	120	120	324
Operate			50	150	200	400
Total cost to completion	**$1,000**	**$700**	**$10,592**	**$11,375**	**$4,020**	**$27,687**

Source: *The SBA Loan Monitoring System Estimated Cost to Completion,* Project Plan (Attachment) LMS.V1.0.004, February 14, 2000.

The total $27.7 million estimate includes about $4 million for infrastructure, $9.3 million for software, $8.8 million for services, $2.5 million for support, $3 million for internal labor, and $0.3 million for other costs.[12] SBA has awarded a contract to refine the cost-to-completion estimate, including costs of work increments.

SBA should continue to refine its cost-to-completion estimate following the completion of the benefit-cost analysis of alternatives and the selection of the best alternative for implementation.

[12]Numbers do not add due to rounding.

In addition, once SBA determines the life expectancy of the loan monitoring system, it also should develop and maintain a lifecycle cost estimate for the system and its components.

KEY MANAGEMENT CONTROLS AND PROCESSES NEED TO BE IMPLEMENTED

As stated earlier, we testified in July 1998 that SBA faced formidable technical and management challenges and risks in executing the plan, including establishing software project management capability, using methodologies and practices, and implementing the loan monitoring system project without having an information technology architecture in place. In following up on SBA's actions to deal with these challenges, we found that the agency is just beginning to adopt and implement basic policies, processes, and tools needed to control and manage a major system development and acquisition project. These include project tracking and oversight, configuration management, quality assurance, and security requirements.

Project Tracking and Oversight Is Planned

Project tracking and oversight involves tracking and reviewing project accomplishments and results against documented estimates, schedules, and performance plans. A documented plan for the project is used as the basis for tracking systems development activities. Actual results and performance are tracked against the project schedule, and the project follows organizational policy for managing systems development.

SBA has adopted an agencywide systems development methodology that suggests that projects should use this type of project tracking and review. According to SBA officials, they intend to use this for the loan monitoring system.

Configuration Management Plans, Policies, and Procedures Need to be Finalized

Configuration management plans, policies, and procedures are a set of management controls over the composition of and changes to computer and network systems components and documentation, including software code documentation and project planning documents. Configuration management is essential to successfully managing complex information systems and ensuring their integrity throughout their life cycles.

SBA has started to formulate and implement configuration management plans, policies, and processes for the loan monitoring system project. Finalizing these will provide SBA with further assurance of the success of the project.

Quality Assurance Activities Are Planned

Quality assurance involves reviewing and auditing systems development activities to verify that they comply with applicable procedures and standards. A software quality assurance group reviews project activities and audits software work products throughout the life cycle, and provides management with visibility as to whether the software project is adhering to its established plans, standards, and procedures. Compliance issues are first addressed and resolved

on the project level. For issues not resolvable within the project, the quality assurance group elevates the issue to an appropriate level of management for resolution.

SBA has not yet established a quality assurance process to ensure that the loan monitoring system project and its activities comply with SBA policies, procedures, and systems development methodologies. However, it is planning to establish a technical review group whose purpose will be to review loan monitoring system project adherence to SBA standards outlined in the SBA systems development methodology. In addition, SBA is planning to contract for independent verification and validation to provide oversight of its systems development efforts.

Loan Monitoring System Security and Privacy Requirements Are Not Fully Defined

Security focuses on the ability to ensure the confidentiality, integrity, and availability of stored and processed data. Unsecured or poorly secured systems are highly vulnerable to external and internal attacks and unauthorized use. Security planning includes the identification of high-level security requirements, including mission, management, and technical security requirements; functional security requirements that cover users' security and privacy needs; data-sensitivity analysis to identify data requiring special protection; and a security architecture that describes the security controls and relationships among the various system components.

While SBA's proposed Internet-based virtual private network may reduce telecommunications costs and provide easy nationwide access to loan monitoring system, the reliance on the Internet

as a key component of the system's architecture brings unique security challenges that must be addressed early in the project's life. However, SBA has not yet developed a security architecture for its target environment, updated its security operating procedures, or defined security and privacy requirements for the loan monitoring system.[13] Because security is a critical feature for the loan monitoring system, SBA should complete its security architecture and update its security operating procedures before it begins the design and development phase of the loan monitoring system.

SUMMARY OF ACTIONS NEEDED

SBA has made substantial progress in planning for the loan monitoring system; however, the agency needs to take additional actions to manage the project's risks. The issues I have outlined today pose considerable challenge, both in the area of timely completion of key planning activities and in the strengthening of project management processes and controls.

In the area of planning actions, SBA should consider taking the following actions: completing the analyses of benefits and costs for alternative business processes identified through SBA's business reengineering effort; performing benefit-cost analyses for systems alternatives; completing the part of its information architecture that specifies the rules and standards for interoperability and maintainability of interrelated systems; identifying requirements and data elements for reports; completing the definition of specific data quality standards; ensuring that systems requirements document include capacity and performance requirements; ensuring that

[13]*Automated Information Security Program* (undated), SOP 90-47.

sound justification exists for pursuing custom-developed functions; and estimating the cost to completion that are based on an analysis of the benefits and costs of system alternatives.

In the project management area, SBA should strengthen its project management process and controls. These include putting in place project tracking and oversight capabilities; implementing configuration management processes; acquiring independent verification and validation for the loan monitoring system project and establishing an internal quality assurance function; and addressing the security challenge posed by Internet-based access to loan monitoring system functions and data. These processes and capabilities are essential to a major systems development and acquisition.

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

Contact and Acknowledgments

For information about this testimony, please contact Joel C. Willemssen at (202) 512-6253 or by e-mail at willemssenj.aimd@gao.gov. Individuals making key contributions to this testimony include Mirko J. Dolak, James R. Hamilton, E. Randolph Tekeley, Hai V. Tran, and Daniel K. Wexler.

(511761)