
Progress Report IRS Business Systems Modernization Program (BSM)

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Business Systems Modernization Progress Report

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Message from the Commissioner of Internal Revenue

The US economy has achieved impressive increases in productivity through investments in information technology. The IRS, which is still dependent on systems installed in the 1960s and 1970s, has established the Business Systems Modernization Program to take advantage of new technology to revamp the way we do business. I firmly believe the program is on the path to succeed.

In only 14 months since the first funds were released, we have put in place the initial elements needed for success. These include dedicated executive leadership, a disciplined methodology, a stringent review and approval process, and a clear vision for how we will transform our business operations. We have already completed tangible deliverables for initial projects that will deliver real business results beginning in 2001, and we will soon publish our overall enterprise architecture plan – Blueprint 2000 – which represents a major update to the previous blueprint published in 1997. Having built the foundation, the program will continue to mature as we gain experience.

While not without start-up problems, our initial experience with this program compares favorably with major successful business systems programs undertaken elsewhere in the private and public sectors, few of which approach the scale of the IRS's program. We have carefully assessed the factors that have led to success and failure at the IRS and elsewhere in major systems programs. We have also benefited from the comments of oversight bodies. Because we understand and recognize the risks inherent in the program, we are committed to managing these risks aggressively and are confident we can succeed.

The enclosed report describes important milestones we have reached as well as upcoming work. Through modernizing our business systems, we are working to improve and expand our service to America's taxpayers.

Sincerely,

Charles O. Rossotti
Commissioner of Internal Revenue

**Internal Revenue Service
Business Systems Modernization Program
Progress Report
September 1, 2000**

Executive Summary

The purpose of this report is to review the progress of the IRS Business Systems Modernization Program (BSM) over the past 14 months.

The U.S. tax administration system, which collects \$2 trillion in revenues each year, is critically dependent on a collection of obsolete computer systems developed by the IRS over the last 35 years.

These systems are fundamentally deficient. They do not and cannot allow the IRS to administer the nation's tax system and provide essential service to taxpayers at an acceptable level of efficiency, effectiveness and risk. The fact that the IRS has struggled for years to modernize its technology, with only limited success, points to the difficulties and inherent risks of this enormous task.

Recognizing the long-term commitment needed to solve this critical national problem – one of the largest and most sensitive business systems modernization programs ever undertaken in the United States – Congress set up a special Information Technology Investment Account (ITIA). This program aims to raise IRS's business systems to a level equivalent to best practice in the private and public sectors while managing the risks inherent in the program.

In only 14 months since the first release of ITIA funds on June 28, 1999, the program has made very substantial progress in the three key areas needed for long-term success. These are: (1) establishing a rigorous and effective management process that will continue to mature over time; (2) producing tangible deliverables for a set of initial projects that will begin to produce real business results in 2001 – less than two years after the first release of funds; and (3) updating the business vision and architecture to reflect recent experience gained in the IRS and elsewhere to guide the program over the longer term.

While not without start-up problems, our initial experience with this program compares favorably with major successful business systems programs undertaken elsewhere in the private and public sectors – few of which approach the scale of the IRS's program.

Management

The IRS Business Systems Modernization Program is one of the largest business systems projects in the United States, and must be managed with discipline and rigor. Over the past 14 months, a great deal of progress has been made in establishing an effective management process, although much more remains to be done. Because of the program's size, expected improvements

can only take place by gaining practical experience. Some of the elements we have included to establish the management process are as follows:

Executive Steering Committee (ESC). Through the Core Business Systems ESC, chaired by the Commissioner, the IRS established an active, effective top-level governance process for the Business Systems Modernization Program. This committee has met six times in the last five months and approves all funding and other key decisions. Membership of this committee includes senior representatives from the Treasury Department and other key executives and stakeholders.

Experienced IRS Management Team. The IRS put together a Business Systems Modernization Program management team that includes three executives with a lifetime of experience in the private sector, and key internal executives with many years of experience in tax systems and tax administration.

Strengthened PRIME Management Team. Over the last few months, the PRIME (Prime Systems Integration Services Contract) Alliance strengthened its program management team by adding a second experienced program manager and a system architect.

Clear Roles and Responsibilities. In June 2000, a major effort was made to clarify roles and responsibilities within the Business Systems Modernization Office and the PRIME.

Proven Methodology. The IRS adopted the proven Catalyst Methodology from Computer Sciences Corporation (CSC) as the basis for all work. From April to June, intensive training of IRS and PRIME Alliance personnel was conducted on this proven methodology. All of the projects were reviewed and approved to ensure compliance.

Active Contracts Management. A major risk in the program earlier this year was the lack of completed task order contracts. This backlog has been largely cleared up and performance contracts have been completed for most of the major task orders.

Program Management Reviews. A regular series of intensive program management reviews has been started to review technical specifications, cost and schedule for each project.

Integrated Master Schedule. An IMS has been developed and is being maintained to identify how different projects relate to and depend on each other.

Management Information Center. A management information center has been established to centralize status reporting for the entire program.

Calculated Investment Decisions. Investment decisions are based on a rigorous process including both analysis of the overall systems portfolio and thorough reviews of business cases as each project progresses through the life cycle.

While the management process for the program is improving rapidly, it still needs further maturation to cope with the expanded level of activity that will occur in 2001 and 2002. Our goal is to achieve an acknowledged industry management standard (Capability Maturity Model-Level 2) for systems acquisition by September 30, 2001, which can only be achieved with experience in managing the program. The Capability Maturity Model (CMM) describes the principles and practices underlying software process maturity and is intended to help software organizations improve the maturity of their software processes in terms of an evolutionary path from ad hoc, chaotic processes to mature disciplined software processes. Reaching the level 2 in CMM means that the basic project management processes are established to track cost, schedule and functionality. The necessary process discipline is in place to repeat earlier successes on projects with similar applications.

Tangible Deliverables for Initial Projects

In a first round of planning in 1999, a limited set of initial projects was defined on which work could proceed at an acceptable risk level. This decision was based on the pre-existing Modernization Blueprint. These initial projects will deliver substantial benefits beginning in 2001 and 2002. They will also provide a practical means of developing and testing our management process and architecture, and lay down an essential foundation for subsequent projects.

The first system to be developed and deployed will be the Customer Communications System. It will allow the IRS to answer more of the 150 million telephone calls it receives, while providing a solid foundation for future systems, nearly all of which require communication with taxpayers.

On May 22, 2000, this project became the first to meet all of the rigorous requirements for deliverables and reviews prior to the development phase, and on June 22, 2000, a firm fixed price task order was signed. Initial implementation is currently planned for the second quarter of 2000 – less than two years after the first release of ITIA funds. In the context of the startup of an enormous, highly integrated and complex systems program, this is an exceptionally fast time for the first major systems deployment.

Following the implementation of Customer Communications, other major systems will be delivered beginning in the second half of 2001, and will continue at regular intervals in 2002 and beyond.

In the last few months, four other projects have passed important milestones as defined in the Enterprise Life Cycle (ELC) methodology being used for all projects:

- The CRM Exam project will be the first system to use commercial applications software, allowing IRS examiners of corporate income tax returns to compute taxes accurately. It completed Milestone 2 on July 10, 2000. Milestone 2 establishes a project concept, its requirements and design elements as a solution for a specific business area or system. A preliminary business case is produced.
- The e-services project will accelerate our ability to meet the overall goal of converting most transactions with taxpayers and their representatives to electronic form. It

completed Milestone 2 on August 8, 2000 and will be the first project to be developed using the competitive solution selection method.

- The Customer Account Data Engine project is the most critical building block in the entire program. It will replace the 35 year-old “master file” system, which contains the authoritative record of all taxpayer accounts. It completed Milestone 2 on August 8, 2000.
- The Custodial Accounting Project will provide the capability to maintain required financial accounting controls over the \$2 trillion of tax revenue received each year. It received qualified approval to proceed to Milestone 4, on August 8 and on September 5, 2000, received ESC approval to request release of ITIA funds for the first of four build segments. The business solution is built in Milestone 4. The system is integrated with other business systems, is tested, and piloted. The system is prepared for deployment at its intended sites.

In addition, important progress has been made on key infrastructure projects that are required to support the business systems projects.

Enterprise Vision and Architecture

In May 2000, the IRS began a major update to the original 1997 Modernization Blueprint, which guided the program in the initial period. The objective of this new project, referred to as Blueprint 2000, is to reflect the substantial knowledge gained through experience, the changes in the IRS organization and the improvements in available technology that have taken place over the last three years.

One of the most important aspects of Blueprint 2000 is the greater emphasis on business vision – stating clearly how the main aspects of tax administration will operate differently in the future with the help of technology.

At the present time, very important work has been completed on the business vision and the enterprise architecture update. The entire tax administration process has been carefully defined down to three levels of detail, specifying how speed, accuracy and timeliness will improve dramatically. On the technical side, key topics such as data architecture and security are being addressed, with the Blueprint updated to reflect them.

Subsequent to completion of the updated enterprise vision and architecture, an analysis will be done to develop migration plans and to propose possible priorities and sequences for all further projects. This plan will be developed and the prioritization decisions considered during January and February of 2001, in time to continue progress beyond the currently planned project deliverables in 2001 and 2002. This planning will be a key part of the ongoing investment decision process.

Risks

Due to its enormous size, complexity and sensitivity, the Business Systems Modernization Program involves considerable risk. However, the fact that there is risk does not mean that the

program will fail. But it does mean that the program could fail if the risks are not adequately identified and appropriate action taken to address them on a timely basis.

The IRS is actively identifying and managing the risks, and has not hesitated to make changes in the program when necessary. For example, in February the initially proposed program was scaled back significantly because management processes were not yet at an adequate level.

Since April, many serious program risks have been reduced or eliminated because of actions taken. However, new risks are constantly identified. The most critical point to understand about managing risks in this program is that making constant adjustments to plans is an indication that risks are being addressed and managed.

Funding

Funding for the program is provided through a special Information Technology Investment Account. This entails four distinct procedures, each with its own sets of steps and organizational components: appropriations, funding releases, ESC approval, and contracting. Through fiscal 2000, Congress has appropriated \$506 million, of which \$249 million has been released (including one pending request of \$32.7) and \$224 million will have been obligated. The pace of spending is accelerating as projects successfully complete early planning milestones and proceed into detailed design and execution.

By setting up the ITIA account, Congress wisely decided that this program required both, an assured source of funding and rigorous monitoring and oversight, before funds were actually expended. To realize and build on the progress to date, and to meet RRA 98's mandates, it is essential that this account continue to be funded.

Section 1. Background

The US tax system, which produces over \$2 trillion in gross revenue each year comprising 95% of the government's revenue, is critically dependent on a collection of computer systems developed by the IRS over a 35 year period. Nearly all IRS employees depend on these computer systems to do their daily jobs, including over 70,000 individuals who use these systems to deliver direct service to taxpayers. This collection of installed systems is very large, comprising a network of 40 mainframe computers, 871 midrange computers, over 100,000 individual computers, 2,779 vendor supplied software products and over 50 million lines of IRS maintained computer code. In a three-year period, the IRS was forced to spend over \$1.4 billion just to make these systems avoid catastrophic failure after the century date change.

In addition, and of foremost importance, the American public has a legitimate expectation that the IRS will do its job, no less effectively than high quality private or public sector organizations. When the IRS Restructuring and Reform Act of 1998 was enacted, the message was clear: the IRS must do a better job in meeting the needs of all taxpayers. Through the modernization effort, the IRS will rise to a much higher level of performance, providing all customers, our employees and the public with top quality service and treatment.

While very large and critically important, the IRS systems are fundamentally deficient and do not allow the IRS to administer the tax system at an acceptable level of efficiency, effectiveness and risk. The most important systems, which maintain all taxpayer records, were developed in the 1960s and 1970s. Many other systems to perform specific functions have been added over the years as the tax code evolved and as new technology became available. This network of systems was never designed or planned. Consequently, current data on taxpayers is often inconsistent imposing immense burdens on taxpayers and employees who use the systems. In addition, making changes to cope with new tax laws or new services is extremely slow and unreliable. As GAO has pointed out, the IRS runs serious risk in accounting for funds and maintaining acceptable security of critical data and systems, risks which cannot be fully addressed with the existing systems. And finally, the IRS cannot realize the enormous potential of the Internet to improve service and reduce costs without replacing its obsolete and deficient systems.

These major problems have persisted despite previous attempts at technology modernization. The lack of success of previous modernization efforts points up the risks and complexity of replacing such a large, old, and complex set of systems. But, the risks of not modernizing are potentially catastrophic. Therefore, there is no risk-free course. The purpose of the IRS Business Systems Modernization program is to modernize the IRS business systems raising them to a level equivalent to best practices in the private and public sectors, while managing the inherent risks of the process.

Recognizing the necessity for a major effort, the Congress in FY98 set up an Information Technology Investment Account and to date has appropriated \$506 million. In 1997, the IRS published its first comprehensive technology blueprint for the modernized systems. In December 1998, the IRS selected a PRIME contract to partner with the private sector in managing the program.

The first funds from the ITIA account, in the amount of \$35 million, were released to the IRS on June 28, 1999, to begin detailed planning for the program.

Purpose and Time Period of This Report

The purpose of this report is to provide the Congress and the public a concise summary assessment of the progress of the IRS in the Business Systems Modernization Program, with emphasis on current status as the fiscal year comes to an end. The progress to date is the result primarily of the work done over the 14 month period from June 28, 1999 when the first ITIA funds were released until September 1, 2000, the writing of this report.

During this 14-month period, the first four months, from July through October 1999, were used primarily for planning of initial projects, initial staffing and training of the program management office and project teams, and preparation of the next release of funds. The period from November to April represented a startup of some of the initial projects and the discussion with various stakeholders of the first major funding request. During this period, IRS top management concluded that some scaling back of the initial proposed plan was required because the management process was not sufficiently developed to scale up activity as fast as initially expected. Also, early in this period, an interim funding amount of \$32.9 million was released pending approval of the full request. In addition, most of the program activity was stopped during a short period until the next release of funds, which occurred on April 18, 2000.

Especially during the 5 months period since the April 18 release of funds, a great deal of progress has been made which can be summarized in three major categories: **Management, Tangible Deliverables for Initial Projects and Enterprise Vision and Architecture.**

Section 2. Management

The IRS business systems modernization program is certainly one of largest programs aimed at replacing a full suite of mission critical business systems anywhere in the US. It must be managed with discipline and rigor, while nevertheless continuing to focus on results as well as process.

There is no way to simply start up a high quality fully reliable management process for this kind of program in a short period of time. Instead, the quality and reliability of the process improves over time with experience. The speed of improvement can be influenced by acquiring experience from industry in the form of both executives and contractors, by building on previous successful experience in the organization (in this case the extremely successful Y2K program), by training in proven methods, and by top-level management attention. The IRS is employing all of these means to accelerate the quality and reliability of the management process. Over the last 14 months a great deal of progress has been made, although much more remains to be done. This continued improvement can only take place by gaining practical experience in managing the program.

The following are some specific indications of progress on the management dimension.

Executive Steering Committee (ESC)

The modernization of IRS's core systems requires sustained leadership from the top leaders of the entire organization. The highest, top-level oversight body for the whole program is the Core Business Systems ESC that includes key executives from the IRS, is chaired by the Commissioner and includes senior representatives from the Treasury Department and other key executives and stakeholders (such as National Treasury Employees Union, General Accounting Office, Treasury Inspector General for Tax Administration and the Office of Management and Budget). The ESC provides a framework for the overall management of the process and is supported by the Business Systems Modernization Office (BSMO). In addition, there is a series of sub-ESCs, which focus more specifically on projects in their area of assigned responsibility. Each of the tiers of the governance structure has top executives representing the Business Operating Divisions (BODs), Information Systems (IS), the IRS PRIME, the FFRDC, and other key stakeholders. This management approach ensures that top management is engaged in a transition strategy for the entire agency that emphasizes business, technological and cultural change.

The CBS ESC meetings are scheduled to coincide with milestone and critical BSM program decisions or as needed. The ESC thoroughly reviews the major elements of the program on a regular basis, including all major milestones. No funding for any project is released until the ESC has approved completion of each milestone and the plan for the remaining milestones.

This is not a routine, rubber stamped process. It is common for projects to either alter the direction or to provide updated information before proceeding.

The ESC has been very active. A list of CBS ESC meetings held from March through August 2000 and samples of agenda topics are provided in **Attachment 1**.

In addition to the dynamic, top-level oversight by the ESC, the BSMO Management Team conducts weekly meetings with staff representatives from OMB, Treasury, GAO, and TIGTA on selected topics of interest to the oversight.

Attachment 2 provides a listing of the GAO, TIGTA and House Ways and Means Committee, Subcommittee on Oversight ongoing engagements and audits on the BSM program and project areas.

IRS Management Team

The IRS top-level management now embodies three individuals with many years of management experience in large-scale business systems programs. These are Charles Rossotti, Commissioner; Paul Cosgrave, CIO; and Bert Concklin, the Business Systems Modernization Executive. Concklin joined most recently, taking charge of the Business Systems Modernization Office (BSMO) on June 13, 2000. And, now that the Y2K program and much of the reorganization are complete, both the Commissioner and the CIO will have more time to devote to assisting the BSMO in managing the program and especially in integrating it with other components of the broader IRS.

Tommy DeWeese, a key executive in the organizational modernization, has brought business and organizational experience to BSMO in his role as Deputy Director, Business Systems Modernization Office. In addition, with the completion of the Y2K program, other individuals with experience in managing this huge program have been assigned to BSMO; namely, John Yost, who was the Y2K Program Manager and has now assumed the job of Director, Office of Program Management, in BSMO.

Following are additional BSMO executives and their corresponding area of responsibility:

Rick Skorny, Director, Tax Administration Vision and Strategy
Curt Turner, Director, Office of Architectural Engineering
Lauretta Brown, Director, Office of Infrastructure
Barbara Jenkins, Director, CADE Program Office
Lisa Fiely, Acting Director, Integrated Financial Systems Program
Bill Conlon, Business Assurance Executive
Brady Bennett, Business Assurance Executive
Irene Scandiffio, Business Assurance Executive
Nancy Rymer, Business Executive, Customer Communications
Greg Carson, Business Executive, e-services

PRIME Top Management Team

The PRIME top management team, led by James Kennedy, has been strengthened with the addition of David Edmondson as Program Manager. Gordon Babcock, Director, Architectural Engineering Office, and Greg Toth, Chief Architect, are leading the development of the architecture, an emerging discipline in information technology management. In addition,

Steve Kalick, who has many years of experience working with Federal programs, has assumed oversight of the PRIME work. Fred Messing has recently joined the PRIME Top Management Team as Director of Engineering.

MITRE

MITRE, a federally funded research and development organization, provides independent, expert and objective strategic, technical, and program management advice, guidance, and support services to the Business Systems Modernization Office.

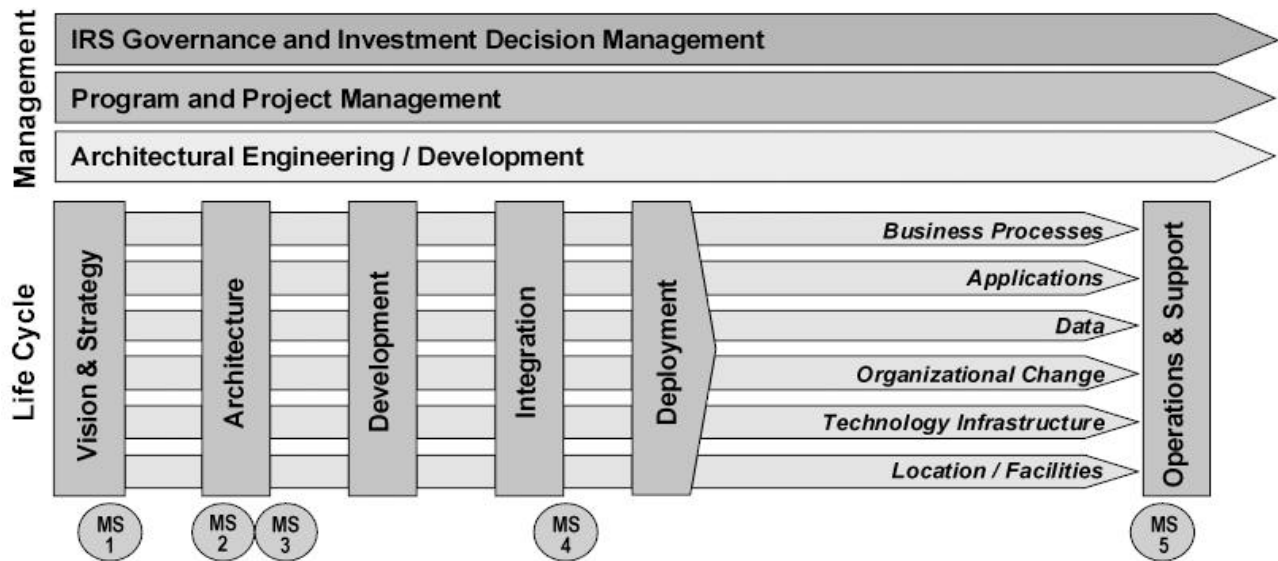
MITRE provides support to the operation and modernization of tax systems, consisting primarily of expert advice to help IRS officials determine, monitor, and evaluate the technical direction of the modernization effort in an environment free from both internal constraints and external market and profit-related influences. This organization also provides a critical infusion of expertise in the context of a special relationship and confidentiality, with freedom from organizational conflict of interest.

Roles and Responsibilities

Given the large number of individuals and organizations involved in the program, it is important to clarify roles and responsibilities of the IRS executives and the contractors. It is particularly important to establish the balance along two dimensions: accountability and partnership. Accountability is essential so that each organization and person understands what they are being expected to do and what their authority and responsibility are. But, it is also true that no organization or individual can succeed alone since there are many interdependencies. In June 2000, a major effort was made to clarify these roles and responsibilities, both within BSMO and in relation to the PRIME Alliance. This culminated in the approval and issuance of the Business Systems Modernization Organizational Change Framework (Volume 1: Organizational Direction Model and Volume 2: Organizational Transition Plan), and a series of meetings and training sessions are being scheduled at which roles are being much more clearly defined. This in turn has aided the completion of definitive task orders for the contractor.

Methodology

The IRS uses the Catalyst methodology from CSC, adapted for IRS as the Enterprise Life Cycle (ELC), as the basis for planning and managing work throughout the program. During the period from April through June, an intense effort was made to assess initial experience with the methodology and to train individuals throughout the program in the proper use of the methodology. Of particular importance, for each project for each key milestone a specific list of required deliverables and approvals was defined. This list was used as the basis by which the Executive Steering Committee determined whether to approve completion of the milestone and approval to proceed to the next milestone. A number of milestone reviews resulted in the teams being required to add or update deliverables.



MILESTONE DESCRIPTIONS

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|---|---|
| Milestone 1 Business Vision | Executive leadership identifies the direction and priorities for IRS business change. This vision and strategy guides which business areas and system development projects are funded for further analysis. |
| Milestone 2 Business Systems Concept | Establishes a project concept, its requirements and design elements as a solution for a specific business area or system. A preliminary business case is produced. |
| Milestone 3 Business Systems Design | Major components of the business solution are analyzed and designed. A baseline business case is produced. |
| Milestone 4 Business Systems Development | The business solution is built. The system is integrated with other business systems, is tested, and piloted. The system is prepared for deployment at its intended sites. |
| Milestone 5 Business Systems Deployment | The business solution is fully deployed, including training on use and maintenance. |

The most important sign of progress in meaningful application of a rigorous methodology is that several major projects have successfully completed a full set of deliverables, including, of special note, the Customer Communications project which completed the first set of deliverables needed to proceed to Milestone 4 (development).

This methodology encompasses changes in business practices and organizational needs as well as the traditional technology program management activities and provides for tailoring based on individual project needs. As part of the definition of each project milestone, the specific path and deliverables from the ELC are agreed upon for the next milestone.

Projects are not expected to conduct all of the activities of the ELC. This principle is reflected in the Software Engineering Institute's Capability Maturity Models, which describes that life cycle processes should be tailored for a project by using a documented set of procedures to select among approved alternatives, modify the selected procedures as necessary, and then document the choices. A course titled "ELC in Action" is available which further explains tailoring in detail. Furthermore, tailoring is also extremely important and valuable to our task order process, which begins with agreement on each project's tailoring plan for the next phase of work.

The deliverables required by the methodology are being used as the basis for completion of definitive contracts for all task orders. The clearing up of the backlog of uncompleted task order contracts is an important benefit and sign of progress in implementing the methodology in a useful way.

Attachment 3 is a list of deliverables produced by the e-services project by Milestone 2 and the Customer Communications project by Milestone 3.

Contracts

One of the major problems and risks in the program in the May-June timeframe was the lack of completed task orders. This in turn reflected problems in application of the methodology and in learning how to produce difficult deliverables such as complete business cases and definition of dependencies with legacy systems. Now, most of the projects have definitized contracts and the backlog is rapidly being cleared up, as shown in **Attachment 4**.

The most important contracts are now performance based. This means that the contractor has assumed contractual responsibility for delivery usually at a fixed price; we have a mutual agreement on the definition of successful delivery of tangible products; and that payment to the contractor is tied directly to meeting business needs.

Finally, as first established in the Customer Communications project, there is now a specific memorandum of understanding between the contractor and the IRS IS staff concerning legacy modifications needed to support the project.

Program Management Reviews (PMR)

The purpose of the monthly PMR is to provide a forum for the BSMO and PRIME to review and assess releases, projects and program support. The review focuses on technical, cost and schedule status, and the management of risks and issues. In addition, it provides an open forum to discuss issues, risks or recommendations that may require PRIME or BSMO executive-level attention. The goal is to generate actions and make decisions to resolve outstanding problems and to ensure that the projects can continue to proceed without delay.

Integrated Master Schedule (IMS)

The Integrated Master Schedule (IMS) provides the capability to manage the design, development, integration, test, and deployment activities and dependencies among multiple projects. It is an integrated set of project schedules that provides a program view of the work to be performed in order to proactively manage the program. The IMS provides intra, inter, and

external linkage of project dependencies, and the schedules contain the activities and tasks that define the work required to produce the deliverables defined in a task order. Project schedules also contain planning information for follow-on phases of work that will be proposed in future proposals.

A top-level view of the current IMS is included as **Attachment 5**.

Investment Decision Model (IDM)

The IDM portfolio-based approach to managing investments has been followed since the beginning of the program. The purpose of this approach is to evaluate Information Technology (IT) investments in the context of the portfolio as a whole and balance the portfolio against available resources. IDM is based on the guidelines provided in GAO's 1997 "Guide for Evaluating Federal Agencies' IT Investment Decision Making." This portfolio approach was first used in 1999 when the initial list of projects was first selected. As each project proceeds through the milestones, a more refined business case is prepared which requires the project to be rigorously evaluated in terms of costs and benefits as well as alignment with overall strategic goals.

As noted below in the section on Enterprise Vision and Architecture, the work being done in visioning and architecture will not only result in an update to the blueprint but will culminate in an analysis of the whole portfolio of possible projects and preparation of "Cases for Action" for additional projects. This analysis will take place during the period January through March 2001 and will be the basis for all projects to be proposed beyond those currently in process.

Management Information Center (MIC)

BSMO has set-up a Management Information Center (MIC). This center is dedicated to program planning, tracking, and communications; provides displays linked to a live up-to-date repository; and, contains a networked database of plans and metrics being regularly updated as well as software analysis and presentation tools.

MIC provides BSM executives with complete, accurate, up-to-date information and analysis about the state of the program. It facilitates communication and coordination among all BSM program participants about mutual goals and dependencies and standardizes data and analysis reporting requirements throughout the program.

Summary of Management

The BSM management process has improved rapidly and is managing the program successfully at the scale at which it is currently operating. However, we are aiming to improve the quality and reliability of the management process. We have a goal of achieving a recognized industry standard (CMM level 2 for systems acquisition) by September 30, 2001. It is critical to stress that achieving this level of improvement this rapidly is a very challenging goal and can only be achieved through practical experience in managing the program.

Section 3. Tangible Deliverables for Initial Projects

The planning work done in 1999 defined a number of specific projects on which work could proceed with acceptable risk. These projects will deliver substantial benefits beginning in 2001 and 2002; will provide a practical means of testing and improving our management process and our enterprise architecture; and will provide essential foundational components for subsequent projects.

The projects selected for initial work were evaluated and selected on a comparative basis from a larger portfolio of possible projects. The projects evaluated opportunities for business process improvements based on customer needs, best practices, and the mission, goals and strategy of the IRS. A prioritization process was used to select and refine a set of modernization projects. The projects selected ranked highest on a combination of criteria which included benefits (to employees, taxpayers and to the IRS operations), risks and readiness to proceed based on prior work.

All of the projects are being managed according to the agreed methodology (Enterprise Life Cycle (ELC)), which defines certain key milestones at which defined deliverables must be produced and accepted in order to proceed to the next milestone. One such deliverable is the business case, which summarizes the scope, benefit, cost and risk of the project. A preliminary business case is developed at Milestone 2, and an updated baseline business case is developed at Milestone 3.

Based on the current plans, these projects will begin to deliver tangible benefits beginning in the second calendar quarter of 2001, and additional capabilities will then be provided in the second half of 2001 and at an accelerating rate several times per year in each year thereafter.

Customer Communications Project (CC)

The Customer Communications project was defined as the first project to be developed in Blueprint 97. The initial purpose of this project is to rationalize the telephone system that is used to receive, route and answer more than 150 million taxpayer telephone calls each year, and at a later date add Internet capabilities. This project will not only deliver direct benefits by increasing the fraction of calls that can be answered with available staff but will also be a critical foundational element for subsequent projects since virtually all major systems require communication with taxpayers.

This system has fewer dependencies on the broader systems architecture since the system itself manages very little data. In almost all cases, other modernized systems will depend on the communications systems being in place, but there are few dependencies in the other direction.

This system was the first project to meet the discipline of our ELC methodology and deliver the related documentation, including a baseline business case, to proceed past the critical Milestone 3 in which approval is given to develop and implement the system. Prior to this milestone, expenditures were for planning design and analysis. This project successfully exited Milestone 3 after careful review by the executive steering committee on May 22, 2000. A firm fixed price

task order was signed on June 22, 2000, and the telephone system is currently planned for initial implementation in the second calendar quarter of 2001.

This system represents one of the major building blocks of the modernized IRS architecture. As currently planned, it will initially be implemented less than two years after the first release of ITIA funds. Even for a separate standalone system of this size, this would be a relatively short time. In the context of the startup of an enormous, highly integrated and complex program, this will be an exceptionally fast delivery time.

The Customer Communications project has already begun to install the hardware and software that will help us achieve the management goals, quality work environment, and improved taxpayer service to which we are committed. As of late August 2000, the team has upgraded ten of 25 Automated Call Distributors (ACDs). Enhancing the Customer Service ACDs will enable the handling of more calls, and set the stage for further enhancements planned for filing season 2002. The upgrade will also provide some hardware redundancy so that Customer Service telephone functions are not interrupted by individual equipment failures. Also as of August, our Atlanta offices have been fully optimized: three older ACDs were replaced by two upgraded ACDs. This optimization decreased the number of ACDs allowing the IRS to save significant resources without degrading service levels.

Customer Relations Management-Examination (CRM-Exam)

The CRM-Exam tax computation project is aimed at providing modern, reliable tax computation software to IRS examiners. This project exited Milestone 2 with an approved preliminary business case on July 10, 2000. A firm fixed price task order was signed on July 14, 2000, allowing the project to continue according to the ELC methodology.

Initial delivery of CRM-Exam will be to examiners of corporate income tax returns. Currently, IRS examiners are provided with software that cannot compute certain important components of corporate income tax accurately, imposing costs for the IRS and taxpayers in delays and errors. As with customer communications, this project will enable delivery of some essential benefits beginning in 2001, while delivering some foundational components that will be needed as part of a larger system. This project will be the first modernization project to make use of commercial off-the-shelf software.

e-services

The e-services project will accelerate our ability to meet the overall goal of conducting most transactions with taxpayers and their representatives in electronic format, as called for by RRA 98. In particular, the e-services project is aimed at delivering by 2002 a capability to register new electronic return originators over the Internet; to deliver transcripts to authorized parties electronically; and to allow third parties who are required to provide certain forms 1099 and information returns to check the taxpayer identification numbers for accuracy before submission. Of particular importance, the e-services project will provide a practical and limited application to define and test the design of our critical security infrastructure for sending and receiving taxpayer data internally and externally. The infrastructure projects are being centrally managed so that they will support all of the other projects, but the e-services project provides the key vehicle for defining the business requirements.

The e-services project successfully completed Milestone 2 with an approved preliminary business case on August 8, 2000, and a firm fixed price task order for work to proceed to milestone 3 is currently being negotiated. The work being done through Milestone 3 will also provide the basis for a competitive process to select the best solution and best value contractor to implement a portion of the e-services project.

Customer Account Data Engine (CADE)

CADE represents the most essential and one of the most difficult aspects of the entire modernization effort. It is designed to provide a modern system for storing, managing and accessing authoritative records of taxpayer accounts, replacing the 35-year old master files. While it is evident that this must be done, previous modernization efforts have failed to develop any practical plan as to how this could be done in an acceptable time frame. Based on work done during the planning phase in 1999, a breakthrough in this regard was achieved and a practical strategy was devised by which entire blocks of taxpayer accounts will be moved to the new systems, eliminating them entirely from the master files. By beginning the replacement with taxpayers who file electronically, important immediate benefits can also be achieved, including providing refunds to electronic filers in a matter of hours rather than weeks.

CADE is a critical foundational component for the entire modernized architecture. The early design work on CADE is also an essential element in updating the Blueprint 97 architecture because it provides a much more in-depth analysis of this central component than was possible in a high-level data model as part of an enterprise architecture.

CADE will create applications for daily posting, settlement, maintenance, refunds processing and issue detection for taxpayer accounts and return data. The database and applications developed by CADE will also enable the development of subsequent modernized systems. The strategy for building CADE is to use segmentation of taxpayer accounts, beginning with the simplest accounts and returns, adding population and increasing functionality with successive releases of the system. CADE will be phased-in using five separate releases deployed over the next six years. Each release will move a specific individual taxpayer segment to the CADE database, starting with individual taxpayers with the simplest accounts and returns. At the conclusion of Release Five, CADE will have replaced IMF and the IRS will conduct business much differently than today.

CADE successfully completed Milestone 2 with an approved preliminary business case on August 8, 2000. A firm fixed price task order for work through Milestone 3 was signed on July 10, 2000. Work past Milestone 3 will be executed after a competitive solution selection to pick the best solution and best value contractor.

Custodial Accounting Project (CAP)

CAP represents a major step towards implementation of an integrated financial management system for custodial account and collections data that conforms to federal laws and standards governing financial management.

The CAP will provide the capability to demonstrate improved financial controls that will build taxpayer confidence by demonstrating that the IRS can successfully reconcile its financial balance sheet and account for and report on all taxpayer funds collected in a timely and controlled manner. This capability will substantially address fundamental financial management and audit issues resulting in the benefit of clean opinion government financial audits with elimination of several material weaknesses and the effective fulfillment of the IRS's responsibility as the nation's tax collector. The business solution is built in Milestone 4. The system is integrated with other business systems, is tested, and piloted. The system is prepared for deployment at its intended sites.

CAP exited Milestone 3 and received qualified approval on August 8, 2000 to proceed to Milestone 4. On September 5, CAP received ESC approval to request release of ITIA funds for the first of four build segments. The first segment builds tax operations data from the Individual Master File only. The second segment includes data from the Business Master File.

Infrastructure Projects

In addition to the business application projects discussed above, considerable progress has been made on infrastructure projects, which are projects needed to provide common technological capabilities in support of the entire architecture. In order to ensure that common standards are maintained and that maximum efficiency in design and procurement is attained, these infrastructure projects are being managed on a central basis. However, work is being planned and managed so as to deliver what is needed by the business applications projects so that infrastructure spending and technical specifications are based on what is really required.

The Security and Technology Infrastructure Release (STIR) will provide customer-focused infrastructure for secure telephony and electronic interaction between employees, tax practitioners, and taxpayers

The Telecommunications Enterprise Strategic Program (TESP) will provide a cost effective, secure solution for efficiently transporting, monitoring and managing voice services, data, and other information systems.

The Enterprise Systems Management (ESM) will provide an Enterprise Help Desk software, and management systems to facilitate more timely response to the business customer and replace asset management functions.

In addition to enterprise infrastructure, the modernization program has developed infrastructure to support the modernization projects with laboratories, a common toolset, and testing environments.

The Enterprise Integration and Test Environment (EITE) will build a comprehensive integration and testing environment to support integration and testing of components from multiple modernization projects. Additionally, the EITE will support release integration of modernization projects with production/legacy components.

The Solutions Demonstration Laboratory (SDL) will provide an environment within the PRIME and IRS that permits the rapid installation and configuration of proposed or potential systems solutions and provides the flexibility to scale and respond to multiple concurrent projects.

The Virtual Development Environment (VDE) will provide a software development lab with standardized tools, information and services for developers of geographically distributed projects. It will serve as a repository for source code, libraries, documentation, application program interface definitions, references and help information.

A summary status of on-going projects is contained in **Attachment 6**.

Section 4. Enterprise Vision and Architecture

The purpose of the enterprise vision and architecture is to set forth a high-level, complete picture of how the future business systems will operate and how they will fit together. This is especially important when there are many specific parts to the overall system and yet they must use common data. For example, all data about any specific taxpayer should be accurate and up to date reflecting all transactions that have occurred, and a taxpayer or employee who receives information about a taxpayer account should get consistent information regardless of which system they are using. This is not the case today. The enterprise architecture is also important to provide everyone involved in developing the new systems a clear picture of the overall business objectives and for systems developers and operators to have a clear set of technical standards.

Achieving the right level of integration, consistency and clarity of vision is a very challenging goal. Excessive detail only obscures and delays the process while lack of adequate substance renders the documents produced useless. While a methodology provides a useful guide, it does not provide a mechanical textbook routine for producing such an important product.

In 1997, the IRS produced the first comprehensive "blueprint" for modernized tax administration systems, referred to as Blueprint 97. This blueprint has been an extremely useful guide for the work done to date on business systems modernization, since it did represent a complete inventory of existing tax administration systems and a coherent and consistent architecture for a modernized set of systems. The projects described above, which emerged from the initial planning for business systems modernization in 1999, used Blueprint 97 as a guide.

In May 2000, the IRS launched a project to make a major update to Blueprint 97, referred to as Blueprint 2000. The objectives of this project are to reflect both the substantial learning that has occurred in the last three years, and the changes in the IRS organization, goals and available technology.

One of the important new aspects of the Blueprint 2000 is the greater emphasis on business vision, which means stating clearly how the main aspects of tax administration will operate differently in the future with the help of technology. In the last two years, the Restructuring and Reform Act of 1998 (RRA 98) has caused the IRS to restate its mission and strategic goals and to conduct a major reorganization, moving from a geographic and functional organization to a customer-focused organization. In addition, following the mandate of RRA 98, one of the IRS key strategies is to convert its interactions with taxpayers and practitioners to electronic form as rapidly as possible. In the work done on the organizational modernization, many studies and strategies for improving tax administration business practices were reviewed, which resulted in the bases for the organizational structure and high-level business processes in the new organization. These are the main elements that are driving the business visioning aspect of the project.

Very important work has been completed on the business vision for the key tax administration processes, setting forth a compelling vision of how tax administration can be improved to serve taxpayers and increase fairness and effectiveness of compliance activities. The entire tax

administration process has been carefully defined down to three levels of detail, covering all activities performed, from Pre-filing education and assistance to Filing and Account Management to Post-filing Compliance. For each process, a concise statement of how the process will change, the benefits to be gained and the technology required to support have been analyzed. Throughout the entire tax administration process, speed, accuracy and timeliness will improve dramatically.

The business vision work, together with analysis of experience gained in applying the blueprint since 1997, is being used to update the technology underpinnings of the architecture. This aspect of the work addresses such key topics as data, security, processing locations, and communications. This project will produce an enterprise architecture update that is compliant with the ELC methodology. This product is targeted for completion by October 2000.

Subsequent to developing the high-level architecture, a revised migration plan will be developed that will analyze and propose the sequence for additional projects that will develop and implement the vision. This migration plan will include the on-going projects and propose additional projects. The migration plan will be developed by January 2001 and additional "Cases for Action" for additional projects will be prepared by March 2001. This will be in time to continue progress beyond the currently planned project deliverables in 2001 and 2002.

A list of key deliverable dates for the Enterprise Vision and Architecture is included in **Attachment 7**. A key element of this process has been intense interaction with top management as issues are defined and preliminary deliverables are produced. Since the project was launched in May 2000, there have been 55 lengthy review sessions that included key members of top management, including the Commissioner.

Section 5. Risks

The IRS Business Systems Modernization Program is a large, complex program involving much business and technology change in sensitive and mission critical tax administration processes. Such a program unquestionably carries with it a great deal of risk. However, what is meant by risk in this context is often misunderstood. The fact that there is considerable risk does not mean that the program will fail to achieve its objectives. Instead, it means that the program would fail or would partially fail, if the risks were not adequately identified and appropriate action were not taken when necessary.

To understand why there is risk and what needs to be done to manage it, it is necessary to understand the nature of the work in the program. The essence of a large business systems modernization program is that it is a learning process in which many people must learn many new things, make decisions about thousands of details that affect how the new systems work, and communicate these to many other people. This process starts at a high level and proceeds to ever increasing levels of detail as projects proceed. At each stage, more is learned and some things that were previously thought to be right will turn out to be wrong or only partially true. Even as computer code is written, this involves a process of programmers learning what was intended, then writing it down, and then others checking to see if the programmers wrote what was intended.

It is a fatal mistake to view this whole process as a mechanical linear process. Instead, if managed properly, ***it is a constant process of learning and adjustment to reflect what has been learned.*** Risks occur because one does not know and cannot possibly know everything important at any stage of a project. Even after it is initially implemented, any successful system will be significantly modified to improve performance based on initial experience. ***Therefore, constant change in response to learning is the nature of a successful system program.***

As an example, the Blueprint 97 correctly determined that a key component of the modernized systems would be a new database to contain authoritative information about taxpayer accounts. The architecture specified at a high level what the data base would contain, and how it would be maintained. It provided for a process by which this new database would be built as a parallel system while the old master files were retained. Eventually, many years in the future, the old database would be retired. As the Business Systems Modernization Program has developed to date, the basic concept and definition of this database has remained. However, much has been learned that is changing some important aspects of this component of the system. The cost and risk of maintaining two parallel taxpayer databases for more than a decade was viewed as too great and an important plan was devised as to how to migrate to the new data base. Some of the experience gained in implementing RRA 98 and the organizational modernization has shown that much more flexibility in defining and maintaining changing relationships among taxpayers and their liabilities, such as taxpayers who become divorced and remarry, is needed. And new technology available in the market provides some opportunities for accessing this data that was not available in 1997. All of these changes are being incorporated in the latest deliverables on the CADE project and the enterprise architecture. Many more details will be learned as the project proceeds to the next milestone.

Another important dimension of learning has to do with people. Many people are involved with the program and they are on a learning curve, individually and collectively. Even people with many years of successful experience have a learning curve with respect to the particular project they are working on. These learning curves can vary considerably, depending on the complexity of the task, the experience of the people, and the effectiveness of leadership. It is vital to adjust the speed and sometimes the scope of the program based on what is learned about the capacity of the organization and project teams.

The most critical point to understand about managing risk in this program is that making constant adjustments to previous decisions and plans is an indication that risks are being addressed and managed. Conversely a failure to make changes in plans in a futile effort to pretend that nothing has changed is a sure sign that risks are not being managed.

The IRS is devoting considerable attention to identifying the risks of the program, and most important to confronting them rapidly and effectively. As part of the management process, at both the program and project level, risks are constantly identified and actions indicated. Adjustments at all levels to reflect these risks have been taken. Since April, many program risks that were serious at that time have been reduced in seriousness or eliminated because of actions taken. For example, a key risk was the lack of completed contracts for task orders; most of this backlog has now been cleared.

One high-level risk that is worth noting because it is not entirely within the IRS control is the risk of continuity of funding. In April there was a short period in which most activities were suspended because of delays in the funding request and approval process. Because the program was not yet operating at a large scale and the delay was short, the cost of that delay period was manageable. However, as the program scales up any period in which work must be stopped poses a very serious risk and will impose large increases in costs. Because, as noted above, the essence of the systems development process is learning and application of learning, if people working on a project are dispersed there is an extremely disproportionate impact in cost and time when the project resumes. In addition, major amounts of management time are diverted to the management of such a stand down and stand up period, which time is not available for managing the work.

A current list of program level risks is provided as **Attachment 8**.

Section 6. Funding

The business systems modernization program is funded by a special account, set up by Congress, called the Information Technology Investment Account (ITIA). Congress recognized that a program of this scale and complexity must be managed as an on-going program with an assured source of funding. It also recognized that proper oversight and control over the spending of these funds must be established.

Funding for BSM activities has four distinct procedures, each with its own set of steps and organizational components.

1. **Appropriations.** Congress funds the ITIA account as part of the annual appropriation process. However, these funds are set aside and cannot be obligated until funds are specifically released.
2. **Funding Releases.** To obtain ITIA funds, the IRS prepares a release request specifying what activities are to be funded for a period ahead. This funding request must be reviewed and approved in sequence by the Treasury Department, OMB, and the House and Senate Appropriations Subcommittees. (GAO reviews the request and reports to the subcommittees.)
3. **ESC approval.** Although funds are available to the IRS based on funding releases, no funds can be spent until the Core Business Systems Executive Steering Committee reviews and approves each specific request. These requests are usually based on completion of a specific milestone in the Enterprise Life Cycle Methodology.
4. **Contracting.** Once funds are approved by the ESC, task order contracts are negotiated. Increasingly, all major task order contracts are being set up on a performance basis in which the contractor agrees to specified performance targets and costs. Only when contracts are signed is money actually obligated. It is important to note that performance contracts can only be set up for complete projects at least through a major milestone. These do not conform to fiscal years and for the largest ones often extend for longer than a twelve-month period.

Attachment 9 shows the cumulative funding projected through the end of fiscal 2000.

As can be seen in the chart, the rate of commitments is increasing rapidly as projects successfully pass the early planning milestones and proceed into detailed planning and then development. As Congress has wisely done in the past, it is essential to provide sufficient funds in the ITIA account to maintain continuity of the program so that projects can continue in an orderly manner. Breaks in funding will be devastating to continued progress. On the other hand, the extremely extensive review and approval process assures that no funds will be released or spent until the CBS ESC reviews and approves each specific request.

CBS ESC meetings (March -August 2000) and Samples of Agenda Topics

March 13, 2000

Near-Term Projects Milestone 3 Decision
Readiness Review
Blueprint/Architecture
Status of ITIA Funds Request

April 3, 2000

ITIA Status (GAO/Congressional Feedback)
Financial Status/PRIME Slowdown
Top Program Risks Pilot
Sub ESC Status Reports

May 2, 2000

Performance-Based Contracting Status Update
Top Program Risks Update
Business Systems Modernization Vision & Strategy (Tax Administration, Internal Management, Blueprint)
Sub ESC (Near-Term Releases Program Office, Milestone Readiness Review Sub Group, ESC Structure)

May 22, 2000-CBS ESC Milestone Readiness Review (MRR)

Customer Communications Project (MRR Findings and Outcome Report, BSMO Endorsement Business Sponsor Endorsement, CIO Endorsement, Sub ESC Endorsement)
CRM Exam 1120 Project (MRR Findings and Outcome Report, BSMO Endorsement, Business Sponsor Endorsement, CIO Endorsement, Sub ESC Endorsement)

May 30, 2000

Business Systems Modernization Office Stand-up
CRM Exam 1120 Request for Milestone 2 Approval
Custodial Accounting Project (CAP) Milestone 3 Gap Analysis
Project Status (Near-Term Releases Project Status, CADE Project Status)

July 10, 2000

BSMO Legislative Mandates and Commitments Report
ESC Planning Approach Task Order Definitization Status
Top Program Risks
Customer Communications Project (Milestone 3 Exit Conditions)

CBS ESC meetings (March -August 2000) and Samples of Agenda Topics, Continued

August 8, 2000

Integrated Master Schedule

Program Management Reviews

ESC Planning Approaches (Progress Report, CBS ESC Proposed Standard Agenda)

Strategic & Investment Management (Tax Administration Vision & Strategy/ Blueprint 2000

Update, e-services Project Milestone 2 Readiness Review,

Customer Account Data Engine (CADE) Project, Milestone 2 Readiness Review,

Custodial Accounting Project (CAP) Milestone 3 Readiness Review)

GAO, TIGTA and House Ways and Means Sub-Committee on Oversight Engagements and Audits on the BSM Program and Project Areas

Government Accounting Office Audits

GAO Audit -- *Review of the IRS' Controls Over and Spending Against its Information Technology Investment Account (ITIA)* – (Job Code #901819)

GAO Audit -- *Review of the IRS Integrated Financial System* – (Job Code #512005)

GAO Audit -- *Review of the IRS Security and Technology Infrastructure Release (STIR)* – (Job Code #512008)

GAO Audit -- *Review of the Customer Account Data Engine (CADE)* -- (Job Code # 512011)

Treasury Inspector General for Tax Administration Audits

TIGTA Audit -- *Review of the Customer Communications Project Fiscal Year 2001 Release* (#2000-20-021)

TIGTA Audit -- *Review of the Internal Revenue Service's Development and Implementation of a Systems Life Cycle Audit Project* (#2000-20-018)

TIGTA Audit -- *Review of the Enterprise Architecture* (#2000-20-019)

TIGTA Audit -- *Review of the Implementation of the IRS' Federal Financial Management Improvement Act of 1996 Remediation Plan* (#2000-100-024)

TIGTA Audit -- *Lack of a Stable Program Management Organizational Structure Is Hindering the Administration of the PRIME Contract* (#2000-100-04)

House, Ways and Means Sub-Committee on Oversight

Review of IRS BSM Activities and Investment Decisions

Deliverables from Customer Communications and e-services Projects

Customer Communications Milestone 3 Deliverables

Baseline Business Case (BBC)

- Executive Summary
- Project Information
- Project Risks
- Project Schedule
- Parts of Current IRS Operations Affected By Project (Identified and Quantified)
- Summary of Analysis
- Impact on Affected Operations
- On-Budget Costs and Savings
- Off-Budget Strategic Benefits

Supporting Information (BBC)

- Statement of Strategic Alignment
- Budget/Capacity/Investment Analysis
- Basis for Estimates of Costs/Benefits
- OMB Exhibit 300B
- Constraints, Assumptions and Dependencies
- Analysis of Alternatives

Project Management Plan

- Project Definition
- Project Plan
- Quality Plan
- Configuration Management Plan
- Risk Management Plan
- Project Startup Plan
- Acceptance Plan
- Training Plan
- Release Plan
- Communication Management Plan

Other Plans

- Organizational Transition Plan
- Organizational Initiative Plan
- Data Conversion Plan
- System Life Cycle Management Plan

Security Certification Package

- Security Risk Assessments (updated)
- Security Plans
- Privacy Impact Assessment
- Systems of Record Notice
- Technical Contingency Planning Document

Technology Model View

- Technology Requirements Model

Logical Technology Model
Performance Engineering Model

System Requirements Report

Systems Requirements
Traceability Matrices
System Verification Plan

Package Evaluation and Selection Report (if PES performed)

System Design Report (SYD only)

Operations System Support Plan
Performance Engineering Model
Selected Conceptual and Logical System/Subsystem Architectures

Proposal Evaluation Report (CSS)

Results of CSS

Selected System Design (CSS)

Acquisition Management Plan

Acquisition Management Plan (IRS)
Acquisition Strategy (PRIME)

e-services Project Milestone 2 Deliverables

Preliminary Business Case

Project Information
Summary of Spending for Project Stages
Other information, includes:
Justification
Executive Summary
Program Management
Acquisition Strategy
Financial basis for Selecting the Project
Adherence to Architecture and Infrastructure Standards
Attachments (references)

Security Certification Package

Security Risk Assessment (preliminary)

Privacy Certification Package

Privacy Impact Assessment (preliminary)
Systems of Records Notice(s) (preliminary)

System Concept (SYC) Report (for SYC subphase only)

Selected System and Operations Concept
System Architecture Risk/Cost/Benefit Analysis Report
Reference System Requirements
Traceability Matrices
Reference System Architecture
Evaluation Report for Make/Buy/Reuse Recommendation
Business Process Performance Model
Future State Conceptual Models
Principles, Constraints and Assumption (all model views)

Test Plans

System Validation and Verification Plan

System Life Cycle Management Plan

Acquisition Management Plan

Acquisition Strategy (PRIME)

Project Management Plan

Project Definition

Project Plan

Risk Management Plan

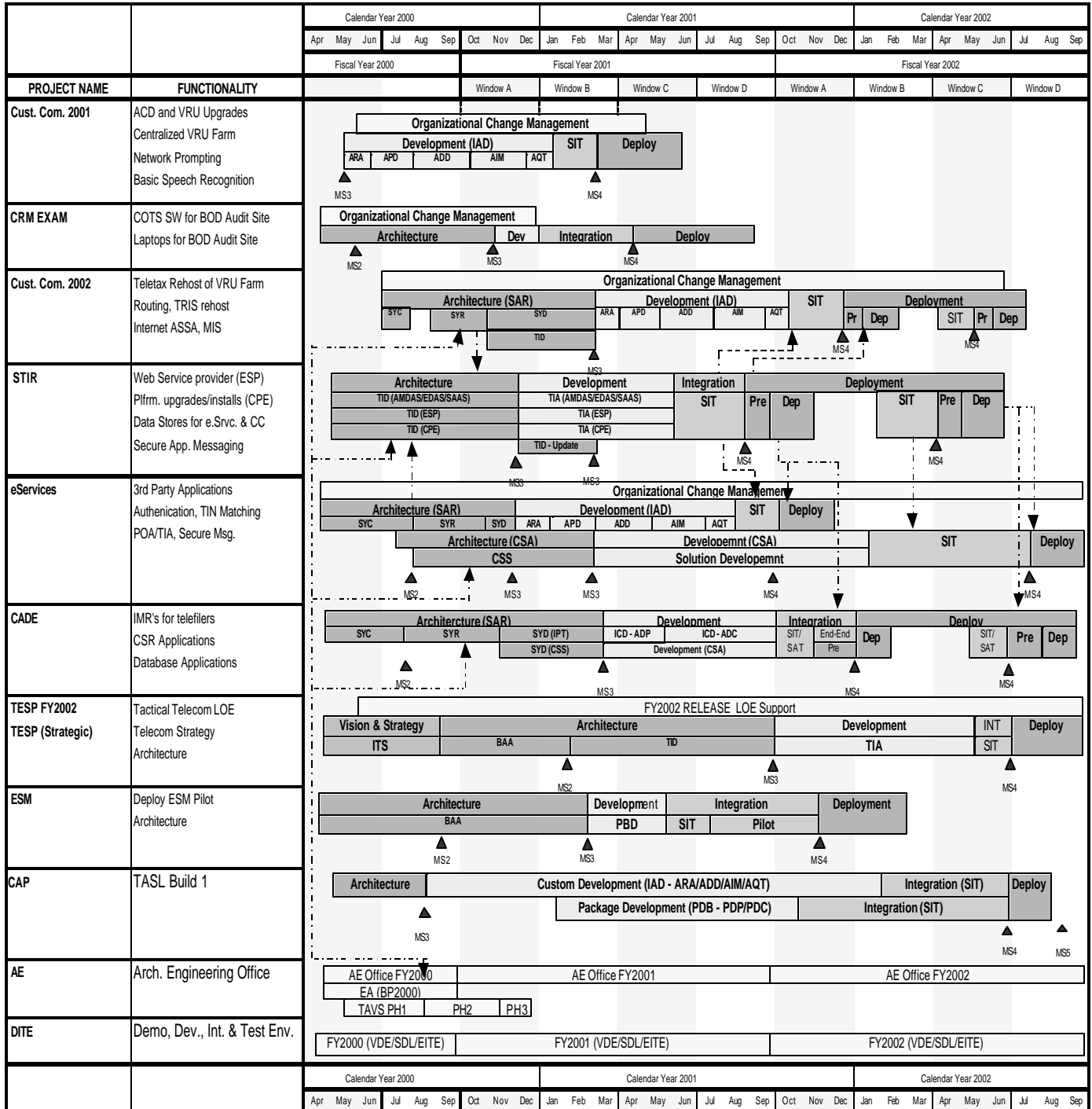
Quality Plan

CM Plan

List of Task Orders

| <u>Task</u> | <u>Status</u> |
|--------------------------------|--|
| CC MS 3 (Release 2001) | Definitized 6/20/00 |
| TAVS Part II | Definitized 6/22/00 |
| PMO | Definitized 6/27/00 |
| Mitre | Definitized 7/5/00 |
| AE/BI | Definitized 7/6/00 |
| CADE MS 2 (Release 1) | Definitized 7/10/00 |
| CRM Exam MS 2 | Definitized 7/14/00 |
| CAP MS 3 | Definitized 7/15/00 |
| ESM MS 2 | Definitized 7/21/00 |
| TESP MS 1 | Definitized 7/21/00 |
| CC MS 4/5 (Release 2001) | Definitized 7/25/00 |
| e-services MS 2 | Definitized 7/25/00 |
| CADE MS 3 (Release 1) Bridge | Definitized 7/31/00 |
| CRM Exam MS 3 | Definitized 8/2/00 |
| DITE | Definitized 8/9/00 |
| e-services MS 3 Bridge | Definitized 8/15/00 |
| STIR MS 3 | Definitized 8/18/00 |
| Enterprise V&S - Initiation | Definitized 8/23/00 |
| CC MS 3 (Rel 2002) Letter Task | Executed 8/23/00 |
| TAVS Part II (BAH) | Definitized 8/28/00 |
| e-services MS 3 | Projected Definitization Date 8/31/00 |
| ESM MS 3 Bridge | Projected Definitization Date 9/6/00 |
| TESP MS 2 Bridge | Projected Definitization Date 9/6/00 |
| CADE MS 3 (Release 1) | Projected Definitization Date 9/29/00 |
| Enterprise V&S - MS 1 | Projected Definitization Date 9/28/00 |
| DITE Mod 1 (BOM) | Projected Definitization Date 9/29/00 |
| DITE (FY 01) | Projected Definitization Date 9/29/00 |
| AE/BI (FY 01) Bridge | Projected Definitization Date 9/29/00 |
| PMO (FY 01) Bridge | Projected Definitization Date 9/29/00 |
| Mitre (FY 01) Bridge | Projected Definitization Date 9/29/00 |
| CC MS 3 (Release 2002) | Projected Definitization Date 9/29/00 |
| ESM MS 3 | Projected Definitization Date 10/23/00 |
| TESP MS 2 | Projected Definitization Date 10/23/00 |
| TAVS Part III (BAH) | Projected Definitization Date 11/17/00 |
| CC MS 4/5 (Release 2002) | Projected Definitization Date 11/30/00 |
| AE/BI (FY01) | Projected Definitization Date 11/30/00 |
| PMO (FY01) | Projected Definitization Date 11/30/00 |
| Mitre (FY01) | Projected Definitization Date 11/30/00 |
| CAP MS 4/5 (TRW) | Projected Definitization Date 11/30/00 |
| STIR MS 4/5 | Projected Definitization Date 12/1/00 |
| CRM Exam MS 4/5 | Projected Definitization Date 12/19/00 |
| e-services MS 4/5 | Projected Definitization Date 3/1/01 |
| CADE MS 4/5 | Projected Definitization Date 3/16/01 |
| Integrated Financial System | Projected Definitization Date TBD |

Integrated Master Schedule Summary



Summary Status of On-going Projects

| Project | Status |
|--|---|
| <u>Business Applications</u> | |
| Customer Communications | <ul style="list-style-type: none"> • Completed Milestone 3 in May 2000 • Working towards exiting Milestone 4 Window A in October 2000 and Milestone 4 Window B in February 2001 |
| CRM Exam | <ul style="list-style-type: none"> • Completed Milestone 2 in May 2000 • Working towards exiting Milestone 3 in December 2000 |
| e-services | <ul style="list-style-type: none"> • Completed Milestone 2 in August 2000 • Working towards exiting Milestone 3 Window A in November 2000 and Milestone 3 Window D in February 2001 |
| CADE | <ul style="list-style-type: none"> • Completed Milestone 2 in August 2000 • Working towards exiting Milestone 3 in March 2001 |
| CAP | <ul style="list-style-type: none"> • Completed Milestone 3 in September 2000 • Working towards exiting Milestone 4 in 2003 |
| <u>Infrastructure</u> | |
| Security and Technology Infrastructure Release (STIR) | <ul style="list-style-type: none"> • Working towards exiting Milestone 3 Window A in November 2000 and Milestone 3 Window B in March 2001 |
| Telecommunications Enterprise Strategic Program (TESP) | <ul style="list-style-type: none"> • Working towards Case For Action in September 2000 |
| Enterprise Systems Management (ESM) | <ul style="list-style-type: none"> • Completed Milestone 1 in December 1999 • Working towards exiting Milestone 2 in September 2000 |
| <u>Laboratories</u> | |
| Development, Integration and Test Environment (DITE includes SDL, VDE and EITE) | <ul style="list-style-type: none"> • Laboratories are preparing to provide support to the other projects. Laboratory activity is not tied to Milestones. |

* Windows refer to releases within the projects.

Key Deliverable Dates for Architecture

| | |
|---|---------------|
| TAVS Contract Awarded | May 30, 2000 |
| Annotated Outlines of Work Products | June 15, 2000 |
| Phase IA TAVS Work Product Drafts | June 30, 2000 |
| AEO Draft 1 of the Work Products | July 15, 2000 |
| Phase 1B TAVS Work Product Drafts | July 28, 2000 |
| Phase I TAVS Work Products Final Draft | Aug. 11, 2000 |
| AEO Draft 2 of the Work Products | Aug. 15, 2000 |
| Phase I TAVS Final Work Products | Aug. 25, 2000 |
| AEO Release 1.0 of the Enterprise Architecture (Blueprint 2000) | |
| - Draft ready for stakeholders review | Oct. 3, 2000 |
| - Version available for public distribution | Nov. 7, 2000 |
| Phase II TAVS Final Report | Nov. 17, 2000 |
| Phase III TAVS Migration Strategy | Dec. 22, 2000 |
| AEO Release 2.0 of the Enterprise Architecture (Blueprint 2000) | Mar. 31, 2001 |

Program Level Risks as of September 1, 2000

1. Delays in institutionalizing the newly rolled out BSMO Organizational Processes and Procedures may impact Program and Project effectiveness.

Mitigation Plan:

- Execute BSMO Transformation Plan
- Implement Organizational Direction Model
- Implement Organizational Transition Plan
- Implement Training and Communications Plan

2. The Filing Season 2002 integration will severely test the release management capabilities of the PRIME and the IRS.

Mitigation Plan:

- Use IMS to manage external dependencies
- Involve IS as stakeholder
- Highlight transition to support (T2S) activities and work products in an ELC supplement
- Tie MOA process to IMS and T2S activities

3. Concurrent program/project initiatives requiring same type skill sets to be requested and leveraged across the IRS may result in understaffed teams competing for resources.

Mitigation Plan:

- Develop a strategy that results in a respected agreement (MOA)
- Use the agreement to manage IRS and PRIME expectations from early within the contract definitization process

4. Concurrent program/project initiatives requiring same type skill sets to be requested and leveraged across the PRIME may result in understaffed teams competing for resources.

Mitigation Plan:

- Coordinate requirements with PRIME Alliance Partners to effectively utilize their expertise and skills
- Aggressively and effectively recruit within and exterior to CSC

5. Projects may have delays because ITIA funding gaps, denials, reductions, or restrictions.

Mitigation Plan:

- Document current activities
- Define end state process
- Document and implement end state process

Summary of Information Technology Investment Account Funding

| APPROPRIATIONS | | |
|----------------------------|---------------|--------------------------|
| Fiscal Year | Amount | Cumulative Amount |
| FY98 | 295 | 295 |
| FY99 | 211 | 506 |
| | | |
| FUNDING RELEASES | | |
| Date | Amount | Cumulative Amount |
| June 28, 1999 | 35 | 35 |
| November 22, 1999 | 33 | 68 |
| April 18, 2000 | 148 | 216 |
| September, 2000 * | 33 | 249 |
| OBLIGATIONS | | |
| Quarter | Amount | Cumulative Amount |
| 3 rd FY 1999 | 7 | 7 |
| 4 th FY 1999 | 19 | 26 |
| 1 st FY 2000 | 7 | 33 |
| 2 nd FY 2000 | 26 | 59 |
| 3 rd FY 2000 | 23 | 82 |
| 4 th FY 2000 ** | 142 | 224 |

Note:

* The \$33 million release request was delivered to the House and Senate on August 25, 2000. This September date is based on the direction that the Appropriations Subcommittees shall have at least 30 days to review our request for funding.

** The obligations for 4th quarter of FY2000 have been projected to September 30, 2000.