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IRS MANAGEMENT

Formidable Challenges  
Confront IRS as It Attempts  
to Modernize

Statement of James R. White, Director  
Tax Policy and Administration Issues  
General Government Division



GAO

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# IRS MANAGEMENT: Formidable Challenges Confront IRS as It Attempts to Modernize

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Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today on the 1-year anniversary of the Internal Revenue Service (IRS) Restructuring and Reform Act of 1998 (Restructuring Act)<sup>1</sup> to discuss management challenges that IRS faces in modernizing its organization and reforming its culture. As my testimony underscores, the challenges that the agency faces in implementing these reforms are no less significant than the value of the improvements that could be achieved.

Depending on the outcome of IRS' efforts, enactment of the Restructuring Act may prove to be a significant turning point in the history of IRS. Its passage signaled Congress' strong concern that IRS had been overemphasizing revenue production and compliance at the expense of fairness and service to taxpayers. It also mandated changes to improve the situation. Among other things, the Restructuring Act required IRS to (1) adopt a new mission statement to place greater importance on serving the public and meeting taxpayer needs, (2) develop and implement a reorganization plan to include the establishment of new operating units serving particular groups of taxpayers having similar needs, (3) conduct training programs to ensure that managers and frontline employees are schooled in the importance of customer service and have the skills to provide it, and (4) carry out numerous specific actions to enhance taxpayers' rights.

Commissioner Rossotti has embraced the spirit of the Restructuring Act and provided a compelling vision of what he wants IRS to become—a fully modernized agency providing top-quality service to taxpayers. The Commissioner has more than a vision, however. In addition to a new mission statement and supporting strategic goals,<sup>2</sup> he has also outlined and begun to implement a modernization strategy that includes five interdependent components—what IRS has dubbed its “five levers of change.” The five components are (1) revamped business practices, (2) organizational restructuring, (3) management roles with clear responsibility, (4) balanced measures of performance, and (5) new technology. If successfully implemented, the modernization strategy could

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<sup>1</sup> P.L. 105-206 (July 22, 1998).

<sup>2</sup> IRS' new mission statement reads, “Provide America's taxpayers top quality service by helping them understand and meet their tax responsibilities and by applying the tax law with integrity and fairness to all.” IRS' supporting strategic goals are to (1) provide top quality service to each taxpayer, (2) provide service to all taxpayers by applying the law with integrity and fairness, and (3) increase productivity by providing a quality work environment for its employees.

fundamentally change IRS' culture to one that embraces customer service as a core organizational value.

Given the reforms that are planned, it should surprise no one that IRS—an agency with a long history of stovepipe management and a culture driven by enforcement statistics—will be challenged to accomplish so ambitious an agenda. IRS has a poor track record for implementation, and many of its past efforts would be considered modest in comparison to the current modernization.

My statement today is based on our past work and our ongoing reviews of IRS' reorganization process, its performance management system, and systems modernization efforts. My statement makes the following points.

- We agree with the Commissioner that the various components of IRS' modernization must be implemented in an integrated fashion. Simply restructuring the organization, for example, without concurrent revisions to work processes and related information systems, will do little to improve the quality of service being provided to taxpayers. However, successfully implementing such a comprehensive modernization strategy, while continuing the business of day-to-day tax administration, will push IRS managers and staff to their limits. Particularly important will be the capacity of middle managers to lead and manage comprehensive change.
- No matter how much IRS changes its organization, work processes, and information systems, its ability to fundamentally change the way it interacts with taxpayers hinges on its ability to ensure that employees demonstrate the desired attitudes and behaviors. A results-oriented approach to managing human capital has the potential to deliver such a result. To fully realize this potential, IRS must finish developing key organizational performance measures, deal with an employee evaluation process that is not currently aligned with IRS' new mission, and develop and deliver a comprehensive training program for both frontline staff and middle managers.
- IRS continues to face formidable system modernization challenges. They include (1) completing the modernization blueprint that IRS issued in May 1997 to define, direct, and control future modernization efforts; (2) establishing the management and engineering capability to build and acquire modernized systems; and (3) investing in small, low-risk, cost-effective modernization increments. The key to effectively addressing these challenges is to ensure that long-standing modernization management and technical weaknesses are corrected before IRS invests

large sums of modernization funds. IRS recently initiated appropriate first steps to address these weaknesses via its initial modernization expenditure plan that represents the first step in a long-term, multi-increment modernization.

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## Ability to Manage and Integrate the Interdependent Change Efforts Is Critical to IRS' Success

One great strength of IRS' modernization strategy is its comprehensive approach to change. If implemented in an integrated manner, the five levers of change can fundamentally alter the way IRS interacts with taxpayers. However, this comprehensive approach also presents a major challenge for IRS. Effectively implementing such a broad and complex set of interdependent changes will strain IRS managers and staff. Having to do so while continuing to operate the existing tax administration process will strain them even further.

The Commissioner believes, and we agree, that to effect real change, IRS must address all five components of its change strategy concurrently because the components are interdependent. Simply restructuring IRS, without concurrent changes in processes for interacting with taxpayers and in the measures that are used to assess those interactions, will have little impact on service to taxpayers. Similarly, it makes little sense to design new work processes without providing employees with the tools they need to effectively implement the new processes. For example, IRS cannot provide top-quality service to taxpayers who have questions about their accounts unless employees can quickly access a modern information system that contains accurate and up-to-date information on taxpayers' accounts.

Undertaking all of the work associated with business and systems modernization while continuing to process returns, maintain taxpayer accounts, and enforce the tax law will push IRS managers and staff to their limits. Accordingly, the Commissioner and his senior executives are attempting, among other things, to set priorities and adjust time frames. For example, in light of the provision in the Restructuring Act that specified a goal of having 80 percent of all returns filed electronically by 2007, the Commissioner adjusted the sequencing of information system development efforts by accelerating electronic filing elements.

For IRS modernization to succeed, however, middle managers will also have to play a role. Because of the magnitude of the proposed changes, these managers will have to take responsibility for developing many of the details of change initiatives and pushing the initiatives down through the organization. Particularly important is the capacity of middle managers to

lead and manage comprehensive change. I will talk more about management capacity later.

IRS will also have tough choices to make in balancing “stay-in-business” needs with long-term improvements. For example, IRS will have to evaluate the trade-offs between changing existing information systems to support or enhance current operations and waiting for the new business processes and systems to be rolled out.

Based on over a decade of work, we believe that a results-oriented, performance-based approach to management can provide IRS with the tools it needs to meet the formidable challenges inherent in its comprehensive approach to change. We are heartened by the fact that the modernization strategy outlined by the Commissioner is consistent with such an approach. As noted earlier, reorganizing IRS alone will not fundamentally change the way IRS interacts with taxpayers. Indeed, our case studies of leading organizations using performance and accountability management principles found that the organizations had varied structures, but similar results-oriented management strategies.<sup>3</sup> By integrating results-oriented management into the day-to-day activities and culture of the organization and holding managers accountable for doing the same, IRS can help avoid the danger of its reforms becoming hollow, paper-filled exercises. Among other things, results-oriented management includes (1) building, maintaining, and marshaling the knowledge, skills, and abilities of employees (i.e., human capital) and (2) developing and effectively using information systems to achieve program results. As discussed in the next two sections, results-oriented management of its resources, both human capital and information systems, poses significant challenges for IRS.

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## Managing for Performance Poses Significant Human Capital Challenges

New business processes, organizational structure, and technology—alone or together—will not significantly improve service to taxpayers without corresponding improvements in how IRS manages and develops its human capital. A results-oriented approach to managing human capital—an approach that aligns employee performance management and training with IRS’ new mission statement, strategic goals, and performance measures—has the potential to deliver such improvements. However, to realize the potential, IRS needs to overcome three challenges. First, a key organizational performance measure, the rate of taxpayer compliance with the tax laws, has not been developed. Second, a new employee appraisal

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<sup>3</sup>Numerous reports in recent years have discussed results-oriented management principles and implementation of the Government Performance and Results Act (P.L. 103-62) by federal agencies. A major report addressing these issues was Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996).

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system aligned with the organizational measures is years away from complete implementation. And third, training that addresses the needs of different employee groups, such as middle managers, has not been developed.

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## Performance Measures

Performance measures can create powerful incentives to achieve the cultural and behavioral changes that will be needed for IRS to effectively perform its new mission. IRS has begun implementing a new set of organizational performance measures that are to balance customer satisfaction, employee satisfaction, and business results. However, some measures have yet to be developed.

Developing a business results measure of taxpayer compliance<sup>4</sup> that can be balanced with customer satisfaction will be particularly important. As IRS has stated, in the absence of such compliance measures, “informed decisions on strategies to encourage voluntary compliance . . . will be impossible, and the historic tendency to fall back on enforcement revenue as a measure of performance may reoccur.”<sup>5</sup> In a hearing held by this Subcommittee almost 2 years ago, we highlighted our concerns about overreliance on enforcement revenue as a measure of performance.<sup>6</sup> We concluded that such overreliance could create undesirable incentives for IRS auditors to recommend taxes that would be unlikely to withstand a taxpayer challenge, imposing an unfair and unnecessary burden on some taxpayers.

In the past, IRS measured compliance through its Taxpayer Compliance Measurement Program (TCMP). Studies done under that program involved detailed audits of a statistically valid sample of tax returns. IRS discontinued these studies because of concerns about the additional burden placed on the taxpayers who were the subjects of the detailed audits. Since then, IRS has not identified a viable substitute for TCMP studies to assess overall compliance.

Without a measure of taxpayer compliance, IRS cannot balance business results with customer satisfaction. Further, taxpayer compliance studies have been used to help IRS target audits on the most noncompliant taxpayers. Consequently, the lack of current compliance data could

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<sup>4</sup>Taxpayer compliance is the extent to which taxpayers file required returns, correctly determine their tax liability, and pay the taxes they owe.

<sup>5</sup>Modernizing America's Tax Agency (IRS Publication 3349, Feb. 1999, pp.44-45).

<sup>6</sup>Tax Administration: Taxpayer Rights and Burdens During Audits of Their Tax Returns (GAO/T-GGD-97-186, Sept. 26, 1997).

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actually decrease service to taxpayers. IRS is concerned that increasingly out-of-date information on compliance will result in more and more compliant taxpayers being hit with unnecessary audits. For both these reasons, we believe that IRS needs a strategy for ensuring the availability of statistically valid compliance data, while limiting the burden that collecting such data imposes on taxpayers.

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## Employee Evaluation Process

Because IRS' current employee evaluation process is not aligned with its new mission and does not support the culture that IRS hopes to create, it must be revised. Last year, we reported that 75 percent of IRS' revenue agents, tax auditors, and revenue officers believed that tax enforcement results affected their evaluations—despite an IRS policy prohibiting the use of such results in evaluating employee performance.<sup>7</sup> Our ongoing review of the two most recent evaluations received by these employees bears out such perceptions. In examining a random sample of their evaluations, we found a strong emphasis on compliance compared to customer service. Moreover, when supervisors made comments on customer service, they sometimes seemed to equate good customer relations with success in obtaining full payment in every case. To illustrate, when discussing customer relations skills, one manager wrote in an employee's evaluation

“Over the last year, the Service is emphasizing that payments be obtained at the conclusion of the examination. It can truly be said that the agent has kept to this philosophy. The agent always seeks to obtain full payment of the deficiency, penalties, and interest. This shows a strong commitment to the Service programs.”

IRS says that it recognizes the problems with the current evaluation process and the important role that employees will have in modernizing the agency. IRS expects to change the evaluation process when it revamps its entire performance management system.

Although IRS is on the right track, it will be years before a new evaluation process is fully operational. IRS cannot afford to wait that long. It is frontline employees—not their supervisors or other IRS managers—who have the most direct and potentially confrontational interactions with taxpayers. Continued reliance on an evaluation process that fails to adequately balance service to taxpayers with compliance potentially could undermine the success of the entire modernization effort. Although organizational structure and systems are important, it is the attitudes and behaviors of employees that will ultimately affect taxpayers.

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<sup>7</sup> IRS Personnel Administration: Use of Enforcement Statistics in Employee Evaluations (GAO/GGD-99-11, Nov. 30, 1998).

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Fortunately, there are opportunities for reinforcing the importance of serving taxpayers within the current evaluation process. During our ongoing review of the existing evaluation process, we identified several features, such as narrative comments and field visits, that supervisors do not use systematically when evaluating their employees. These features could be used to greater advantage to reinforce the importance of customer service among enforcement employees. For example, the narrative portion of an employee's written evaluation provides supervisors with an opportunity to focus on employees' customer service skills and contributions. Also, field visits that are to be conducted as part of the employee evaluation process could provide excellent vehicles for supervisors to directly observe employee-taxpayer interactions and to provide coaching and feedback to employees.

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## Training

Training has proven to be an important tool for agencies that want to change their cultures. To have this kind of impact, IRS' training will have to be comprehensive both in its subject matter and in who receives it. Training will need to (1) cover the new organizational structure, new business processes, and new information systems; (2) cover performance measures and the use of such measures to manage IRS; (3) be provided to all employees from frontline staff to senior managers; and (4) be aligned with the performance management system and new mission. For training to have real impact, it will have to be continuously reinforced in the day-to-day work environment. IRS is still defining its modernization-related training requirements and assessing its ability to deliver those requirements, but the plans we've seen thus far address all four of the issues outlined above. However, implementing all of this will be neither cheap nor easy.

After reorganization, most frontline employees and their immediate supervisors are to be in the same or similar jobs. Job-specific training will be important, however, because IRS is beginning to implement significant changes to its organization, processes, and information systems. For example, in lieu of hiring a large number of seasonal employees to handle the return processing workload during the annual filing season, IRS plans to increase the number of permanent employees and expand their job responsibilities to include compliance work that they can do after the filing season. Those employees will have to be cross-trained so that they can handle both their return processing and compliance responsibilities. Other employees who will have to be cross-trained to handle the responsibilities envisioned by IRS' plans include (1) managers who are to supervise groups that include persons doing audit work and persons doing collection work and (2) employees, referred to as "tax resolution representatives," who are

to provide an array of services, including certain audit and collection services, to taxpayers visiting IRS walk-in sites. This kind of cross-functional expertise is consistent with IRS' efforts to provide top-quality customer service. It remains to be seen whether employees can effectively fill these kinds of cross-functional roles, but it is clear that training will be a critical factor in their success. Another factor will be the way training is reinforced outside the classroom, for example, by supervisors acting as role models.

As I mentioned earlier, the changes envisioned at IRS are so comprehensive that the agency's top leadership cannot work below a very strategic level. Fundamentally changing the way IRS interacts with taxpayers depends on the capacity of lower-level managers, from frontline supervisors up through the senior executive service, to do the detailed planning, leading, and managing necessary for successful IRS modernization. These lower level managers must be skilled in planning, performance measurement, and the use of performance information in decision-making. Our work has shown that ensuring that IRS has the capacity it needs in this area will be a challenge.

For example, in January 1998, IRS established a central Taxpayer Service and Treatment Improvement Program to oversee implementation of numerous customer service improvement initiatives that were on the books at that time. By January 1999, IRS had set priorities and assigned accountability for their completion to specific executives. However, when we reviewed 19 of the initiatives that had progressed past the planning and design phase, we found that many were missing basic management information such as completion dates and performance measures.<sup>8</sup> Such basic management information should allow IRS to track progress toward goals and provide a better basis for organizational and management decisions.

To their credit, IRS executives have been responsive to our findings and now have draft guidance for implementing our recommendations. Our point today is that such guidance should not have been necessary. Generating and using basic management information needs to become routine for all levels of IRS management.

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<sup>8</sup> IRS Customer Service: Management Strategy Shows Promise But Could be Improved (GAO/GGD-99-88, May 5, 1999).

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## IRS Continues to Face Formidable Systems Modernization Challenges

The challenges that IRS faces in modernizing its tax systems are significant, and the stakes are high. IRS' well-publicized, failed prior attempts to leverage information technology in administering our nation's tax laws serve as an alert to the significant challenges that lie ahead. The key to effectively addressing these challenges is to ensure that long-standing modernization management and technical weaknesses are rectified before IRS begins investing large sums of money.

In 1995, we reported on the weaknesses that were the root causes of IRS' past modernization problems, recommended ways to correct them,<sup>9</sup> and designated the modernization as a high-risk or "challenged" federal program.<sup>10</sup> Since then, we have reviewed IRS' actions to address our recommendations and strengthen its modernization capability, such as the development of a modernization blueprint in May 1997, and we have made additional recommendations in light of IRS' actions.<sup>11</sup>

The good news is that IRS' executive team, under the direction of the Commissioner and Chief Information Officer, have initiated appropriate first steps to begin addressing system modernization management and technical weaknesses. Last month, we reported on IRS' initial modernization expenditure plan.<sup>12</sup> We concluded that the initiatives defined in the plan were consistent with our past recommendations for establishing effective modernization management and engineering capabilities and incrementally acquiring architecturally sound system solutions to satisfy validated business needs. Additionally, we found that the plan satisfied legislated conditions for systems modernization.

The initial expenditure plan defines modernization initiatives for a 5-month period ending in October 1999 and thus represents the first incremental step in a long-term, multi-increment modernization process. Once implemented, this initial expenditure plan alone will neither fully implement our past recommendations nor eliminate the systems modernization weaknesses and challenges that our recommendations are

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<sup>9</sup> Tax Systems Modernization: Management and Technical Weaknesses Must Be Corrected If Modernization Is To Succeed (GAO/AIMD-95-156, July 26, 1995).

<sup>10</sup> High-Risk Series: An Overview (GAO/HR-95-1, Feb. 1995).

<sup>11</sup> For example, see Tax Systems Modernization: Actions Underway But IRS Has Not Yet Corrected Management and Technical Weaknesses (GAO/AIMD-96-106, June 7, 1996) and Tax Systems Modernization: Blueprint Is a Good Start But Not Yet Sufficiently Complete to Build or Acquire Systems (GAO/AIMD/GGD-98-54, Feb. 24, 1998).

<sup>12</sup> Tax Systems Modernization: Results of IRS' Initial Expenditure Plan (GAO/AIMD/GGD-99-206, June 15, 1999).

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intended to effectively mitigate. IRS leadership says that it understands this and is committed to fully implementing our recommendations and effectively addressing the many challenges that lie ahead.

Our recommendations and the challenges still confronting IRS fall into the following three groups, each of which is discussed below: (1) completing the modernization blueprint; (2) establishing project management and system/software engineering capability; and (3) investing in small, low-risk, cost-effective modernization increments. Until our recommendations are fully implemented, we will continue to designate IRS' tax systems modernization as a high-risk and "challenged" federal program.

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## Completing the Modernization Blueprint

In response to our 1995 recommendations,<sup>13</sup> IRS issued, in May 1997, its modernization blueprint, including about 3,600 high-level business requirements, a target enterprise systems architecture that described in general terms the future systems environment needed to satisfy the business requirements, and a general sequencing plan for transitioning from IRS' current systems environment to its future systems environment. In September 1997 congressional briefings and in a subsequent report,<sup>14</sup> we concluded that the blueprint provided a solid foundation from which to define the level of detail and precision needed to effectively and efficiently build a modernized system of interrelated systems. At the same time, we noted that the blueprint was not yet complete and did not provide enough detail for building or acquiring architecturally compliant systems. Additionally, because the blueprint was developed before the Restructuring Act and the Commissioner's organizational modernization, we reported in January 1999 that the blueprint needed to be validated in light of these organizational and business process changes.

IRS has acknowledged these limitations and plans to complete the blueprint. In fact, its initial expenditure plan defines initiatives intended to validate business requirements and provide missing architecture precision and detail for ongoing system initiatives. Additionally, the initial expenditure plan provides for a revised modernization sequencing plan as well as the selection of enterprise architectural standards in such areas as data base management, security, communications, user interface, and client and server platforms.

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<sup>13</sup> GAO/AIMD-95-156, July 26, 1995.

<sup>14</sup> GAO/AIMD/GGD-98-54, Feb. 24, 1998.

Completing the modernization blueprint poses a formidable challenge for several reasons.

- First, IRS' organizational and business restructuring is ongoing, meaning that both completion of IRS' enterprise systems architecture and revision of its sequencing plan must be closely coupled with and validated against these restructuring efforts. Doing so will not be easy and will require an unprecedented integration of IRS' business and systems organizational cultures. To do less presents the risk that modernized systems will not effectively and efficiently support IRS' core mission needs.
- Second, IRS has a series of enterprise architectural decisions that need to be made before investing in modernized systems, beginning with architectural principles (e.g., Will users be supported regardless of geographic location? Will IRS' existing investment in mainframe technology be preserved?), followed by logical architectural characteristics (e.g., What data structure will facilitate business process reengineering efforts? Should a geographic or a business process "tiered" architecture be adopted?), and culminating in how technology will be physically implemented (e.g., What operating system, hardware platforms, and database management system standard should be used?). The long-term implications of these interrelated enterprise architectural decisions are enormous. If properly made and effectively implemented, these decisions can guide and constrain the architectural makeup of a secure, interoperable, scalable, and maintainable future systems environment. If not, IRS will likely remain mired in its currently inefficient and ineffective stovepiped systems environment.
- Third, IRS must minimize the number of new system development and acquisition projects that it undertakes until it addresses the above key architectural decisions. Otherwise, IRS will be forced to align certain system-unique architectures with its "to-be-completed" enterprise architecture. A case in point is IRS' ongoing Integrated Personnel System project, which is part of a Treasury-wide effort that will use an Oracle database management system running on a UNIX platform.<sup>15</sup> Once IRS' enterprise architectural decisions have been made, IRS will have to integrate this personnel system with its systems developed or acquired according to its enterprise architecture. Depending on the extent of compatibility, this could mean that IRS will have to incur the cost of

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<sup>15</sup> A UNIX platform consists of UNIX operating system software (originally developed at AT&T's Bell Laboratories and commercially available from various companies) and compatible hardware, which together support the operation of application software.

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Statement

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additional hardware and software associated with integrating the different products.

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Developing Project  
Management and  
System/Software  
Engineering Capability

IRS has historically lacked disciplined and structured processes for managing information technology (IT) projects and internally developing software-intensive systems. In 1995, we made recommendations to correct these weaknesses,<sup>16</sup> and, in response, IRS defined (as part of its 1997 blueprint) a systems life cycle framework that described the “cradle-to-grave” processes for managing IT projects and building systems. At the same time, IRS stated its intention to rely more on contractors to build modernized systems, and thus become a system/software acquirer rather than an in-house system/software developer as it had been in the past. To this end, IRS also stated that it planned to “partner with” a Prime Systems Integration Services (PRIME) contractor in the acquisition and integration of modernized systems.

In February 1998, we reported that although the systems life cycle overview provided a reasonable framework, it was not yet complete and did not provide the needed specificity to adequately build modernized systems.<sup>17</sup> For example, IRS did not have detailed process definitions for any of the systems life cycle phases. In addition, organizational roles and authorities had not been adequately specified, making it unclear who does what in each systems life cycle process and phase. We also reported that IRS had not yet defined and implemented the mature software processes, including software acquisition processes, that would be essential for IRS to effectively manage contractors under its strategy for acquiring, rather than developing, software-intensive systems.

IRS has since hired a PRIME contractor, and in association with the PRIME, has initiatives under way that are intended to establish the requisite management and engineering capability needed to effectively modernize its systems. In particular, IRS' initial expenditure plan provides for establishing “enterprise life cycle” or ELC management and engineering processes. ELC is to be an adaptation of the PRIME contractor's commercially available systems life cycle management approach and associated tools, incorporating needs that are unique to IRS, such as key life cycle decision points. IRS concluded that adapting the PRIME contractor's commercially available methodology to meet IRS' needs would be less costly and faster than completing the systems life cycle

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<sup>16</sup> GAO/AIMD-95-156, July 26, 1995.

<sup>17</sup> GAO/AIMD/GGD-98-54, Feb. 24, 1998.

contained in its 1997 blueprint. We reviewed the PRIME contractor's commercially available methodology and found that it meets the requirements specified in the blueprint's systems life cycle overview and is consistent with the approaches that successful private and public sector organizations use to manage large IT projects.

In addition, IRS' initial expenditure plan provides for institutionalizing mature software/system acquisition processes. That is, as part of the ELC, IRS intends to define and implement software development and acquisition processes in accordance with Software Engineering Institute capability maturity model requirements.<sup>18</sup> Among this maturity model's requirements are disciplined and rigorous processes, procedures, and practices for effectively acquiring software-intensive systems through the use of contractors, including processes concerning requirements development and management, contractor solicitation and selection, contractor tracking and oversight, and evaluation of contractor delivered products.

Significant challenges still confront IRS in institutionalizing project management and software/system engineering rigor and discipline and thus putting in place the capability needed to effectively modernize. For example, the ELC processes, procedures, practices, handbooks, models, methods, and tools need to be established, which means that the contractor's commercially available methodology must first be tailored to meet IRS' needs. Next, IRS has to implement the ELC on its IT projects, which requires training IRS personnel on how to use and apply the ELC. Further, IRS will need to establish structures and processes to ensure that IT projects comply with the ELC.

Compounding these challenges is IRS' simultaneous need to ensure that it effectively manages the PRIME and other contractors involved in each of the ongoing modernization projects, pending completion and institutionalization of the ELC. For example, we reported in June 1999<sup>19</sup> that IRS had not yet defined the respective roles of the Service and its modernization contractors. Consequently, IRS undertook an effort to develop a Concept of Operations document that defines the roles, responsibilities, authorities, structure, and rules of engagement for the PRIME, IRS, and other IRS support contractors. To ensure that this important task is completed before modernization begins, we

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<sup>18</sup> This model was developed by the Software Engineering Institute at Carnegie Mellon University to evaluate an organization's software development or acquisition capability.

<sup>19</sup> GAO/AIMD/GGD-99-206, June 15, 1999.

recommended in our June report that IRS report on its progress in completing this task in its next modernization expenditure plan.

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## Incrementally Investing in Modernized Systems

To minimize the risk of IRS investing in systems before our recommendations were fully implemented, we have recommended every year since June 1996 that Congress limit IRS' IT spending to certain cost-effective categories, such as small, low-risk, and cost-effective efforts that can be delivered in a relatively short time frame.<sup>20</sup> In IRS' fiscal year 1997, 1998, and 1999 appropriations, Congress limited IRS' IT spending to efforts consistent with these categories.<sup>21</sup> Such an incremental approach to investing in modernized systems is used by leading public and private sector organizations. In addition, the Clinger-Cohen Act<sup>22</sup> and Office of Management and Budget (OMB) policy<sup>23</sup> endorse this approach to funding large system development investments. Using this approach, organizations take large, complex modernization efforts and break them into projects and subprojects that are narrow in scope and brief in duration.<sup>24</sup> This enables organizations to determine whether a project delivers promised benefits within cost and risk limitations and allows them to correct problems before significant dollars are expended, which in turn mitigates the risk of program failure.<sup>25</sup>

Consistent with our recommendation for incremental investment, IRS has adopted a modernization investment strategy under which it is to first develop and implement the management and engineering capability to build modernized systems and then incrementally invest in manageable, discrete system initiatives that are to be specified in its revised sequencing plan. IRS' commitment to incremental investment management is the initial step. The real challenge is translating commitment into everyday practice. To do so, IRS must define structures and processes for project selection, control, and evaluation that specify, among other things, who is responsible and accountable for making investment decisions, the criteria

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<sup>20</sup> GAO/AIMD-96-106, June 7, 1996.

<sup>21</sup> P.L. 104-208, Sept. 30, 1996; P.L. 105-61, Oct. 10, 1997; and P.L. 105-277, Oct. 21, 1998.

<sup>22</sup> P.L. 104-106, Feb. 10, 1996.

<sup>23</sup> Evaluating Information Technology Investments, A Practical Guide (Executive Office of the President, OMB, Nov. 1995) and OMB Memorandum M-97-02, Funding Information Systems Investments (Oct. 1996), referred to as the "Raines Rules."

<sup>24</sup> GAO Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology, Learning From Leading Organizations (GAO/AIMD-94-115, May 1994).

<sup>25</sup> Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-making (GAO/AIMD-10.1.13, Feb. 1997).

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that will be used to make decisions, the analysis and information upon which to base decisions, and the tools and methods to be used in performing the analysis and generating the information. IRS will also need to ensure that these structures and processes are institutionalized through training and enforcement.

Central to IRS' incremental investment management strategy will be the need to break large system projects into a sequence of incremental builds that is economically justified on the basis of a compelling business case. Additionally, IRS will need to track and monitor whether each increment is producing promised benefits and meeting cost and schedule baselines and ensure that this information is reliably reported to executive decisionmakers. By doing so, organizations can address variances from expectations incrementally, before significant dollars are expended. To this end, we recommended in our June 1999 report<sup>26</sup> on IRS' initial expenditure plan that IRS fully disclose in future expenditure plans its progress against incremental goals, deliverables, and benefit expectations. As it has with each of our recommendations aimed at mitigating the systems modernization challenges that it faces, IRS has agreed to do so.

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In summary, the modernization effort under way at IRS has the potential to deliver improved service to taxpayers. IRS' agenda, though, is both ambitious and high-risk. We have been impressed by the Commissioner's leadership and commitment to change as well as IRS' efforts to date. However, sustainable improvement in service to taxpayers will depend on IRS' managers successfully marshaling the agency's resources, both human and systems, to deal with that challenging agenda.

Mr. Chairman, this concludes my prepared statement. I would be happy to answer any questions you or other Members of the Subcommittee might have.

### **Contact and Acknowledgments**

For future contacts regarding this testimony, please contact James R. White at (202) 512-9110. Individuals making key contributions to this testimony included Randolph Hite, David Attianese, Deborah Junod, Gary Mountjoy, Agnes Spruill, and Lorne Dold.

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<sup>26</sup>GAO/AIMD/GGD-99-206, June 15, 1999.