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Budgetary Implications of IRS' Tax System
Modernization and Automated Examination
System Efforts

Statement of
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Before the
Subcommittee on Oversight
Committee on Ways and Means
House of Representatives



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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to assist the Subcommittee in its inquiry into IRS' budget for fiscal year 1990. My statement will focus on the information technology aspects of this budget. In brief, we found that IRS' 1990 ADP budget request of about \$933 million appropriately focuses resources on two critical efforts: maintaining existing computer systems and pursuing IRS' long-range plan for automation, currently known as Tax System Modernization. However, we have noted two areas that have budgetary implications for 1990 and beyond:

- Over the last few years, IRS has not consistently identified the individual projects that constitute Tax System Modernization. Projects have been merged, split, renamed, added, or deleted. This has made determining the budgeted and actual cost of modernization very difficult and its progress hard to measure. We believe IRS should clearly and consistently identify Tax System Modernization projects from year to year. This would keep the Congress, Treasury, and OMB better informed on the scope, progress, and cost of the Tax System Modernization program.

- The Automated Examination System (AES) has been plagued by escalating costs, schedule delays, and elusive benefits. Recognizing these problems, OMB and Treasury have reduced IRS' 1990 budget request for AES from about \$110 million to \$19.5 million. Under the circumstances, the Subcommittee may

wish to obtain from IRS information on what tangible or intangible benefits are expected before spending these funds. In addition, before committing any additional money to this system in the future, IRS needs to clearly demonstrate its benefits, resolve its development problems, and plan for its eventual integration into the Tax System Modernization effort.

My testimony is based on work that is still in process. As a result, these observations are preliminary.

IRS' INFORMATION

TECHNOLOGY BUDGET REQUEST

During the past few years, it has been difficult to determine the total funding for IRS' Tax System Modernization effort. Because projects have been renamed, consolidated, split, and not always clearly identified in budget documents, the total estimated cost for Tax System Modernization is hard to track and has been understated in past years.

The 1990 budget request, for example, includes about \$235 million for 17 projects identified as part of Tax System Modernization. In contrast, the fiscal year 1989 budget request of about \$92 million for Tax System Modernization included only 5 projects. The current 17 projects include 4 of the previous 5 projects, all or parts of 11 existing projects not previously considered part of Tax System Modernization, and 5 new projects. If IRS had cited these

projects as part of Tax System Modernization in the fiscal year 1989 budget, the amount for Tax System Modernization would have been about \$175 million, or almost twice the total amount reported for the program last year.

In addition to the 17 projects designated as part of Tax System Modernization, there are still other projects that IRS considers to be part of the modernization program, yet are not identified as such in the 1990 budget. For example, the 1990 budget request for two projects--the Automated Underreporter Program and the Automated Examination System--amounts to over \$29 million. Both of these projects were listed as part of Tax System Modernization in the 1988 IRS Management Plan. In addition, the Acting Commissioner of IRS stated before this subcommittee on March 16, 1989, that the Automated Underreporter Program was one of three examples of a Tax System Modernization project well underway. Yet, neither the Underreporter Program nor the AES are cited as modernization projects in IRS' proposed budget for 1990.

In order for the Congress to provide adequate oversight of this essential and costly program, IRS should clearly and consistently identify in its yearly budget requests all projects that comprise the modernization program. In addition, a concise comparison of past and present funding requests and expenditures by project, including information on funds reprogrammed among projects, should facilitate the Congress' ability to monitor the progress and cost

of this program. This information would also be useful to Treasury and OMB in the budget approval process.

AUTOMATED EXAMINATION SYSTEM

BUDGET CUTS ARE APPROPRIATE

The development of IRS' Automated Examination System presents a bleak picture. As originally conceived in 1982, AES was to automate the examination of tax returns in IRS' Service Centers and district and local offices, at a cost of about \$77 million. The project was significantly expanded in 1984 to provide additional features, including 18,000 laptop computers and software for field agents. The expanded system was to be completed by 1989 at a cost of \$1 billion.

Since expansion, cost estimates have risen by \$800 million, the schedule has slipped by 6 years, and IRS has been unable to conclusively demonstrate benefits from the one portion of the system that is operational. In addition, AES is being developed without adequate planning for its intended integration into IRS' long-range Tax System Modernization effort. Achieving integration after AES has already been developed could involve difficult and costly system modifications.

Many of the difficulties AES has experienced have been due to software development problems. For example, the first operational software produced under AES was intended to increase

productivity by automating the examination of Form 1040 returns on the 18,000 laptop computers. Unfortunately, the first version of this software that was delivered to revenue agents in July 1986 was extremely cumbersome to use. A study by a private contractor in May 1988 found that 77 percent of revenue agents were dissatisfied with this software, and only one third used it. Another study quoted AES managers as expressing serious doubts that it could ever save the agents time in performing their work. IRS had to revise the software and has now fielded a version that performs the same functions but is less cumbersome.¹

This software is now being rewritten in a different programming language. Although the Office of Computer Services originally approved the language the contractor used in writing the laptop software, after the software had been written Computer Services reversed its position because it did not intend to maintain personnel skilled in the original language used for the laptops' software. The AES project office is currently rewriting the laptop software in an IRS standard programming language and has completed about one third of it.

AES benefit estimates have proven to be questionable. For example, benefit estimates in January 1987 assumed that AES would produce about \$43 billion in increased tax revenues over the life of the system. Six months later, this estimate was reduced to

¹The first version of the software required agents to switch back and forth among 18 different disks to run the system. This software was revised and now uses seven disks.

about \$14 billion when IRS' Examination Planning Office made a significant correction in the method the AES project office used to estimate benefits. Furthermore, the basic assumption underlying this revised estimate is questionable because IRS has been unable to verify that the use of laptop computers has actually resulted in the examination of additional tax returns or increased tax revenues. IRS has abandoned its original approach of basing project benefits on increased tax revenues and is devising a new system for determining benefits on the basis of potential staff-year reductions.

The issue of integration is unresolved. By integrating systems such as AES with other Tax System Modernization initiatives, IRS hopes to allow users on different systems to exchange taxpayer information and update taxpayer accounts in its master files. However, in order for this data exchange to work, the data elements in all systems must be consistent. For example, data elements such as a person's name must have the same structure in every system. In other words, John Peter Smith's name must appear as "John Peter Smith" in every system. If it appears as "Smith, John P." or "J.P. Smith" in different systems, the data on this taxpayer could not be automatically exchanged.

Because AES has been allowed to progress ahead of Tax System Modernization, it has developed its own structures for the data it uses. IRS has not yet addressed how it will make AES data structures consistent with data structures of other systems that

are part of the modernization effort. Additional data exchange issues include determining how data will be distributed among the different systems and how it will be kept current. Unless issues such as these are resolved, AES will not be able to automatically exchange data with other systems.

IRS decided to develop AES independently and to incorporate it into Tax System Modernization later because it was believed that AES provided important immediate benefits and should not be postponed. By implementing AES before determining how it will be integrated into Tax System Modernization, however, IRS risks having to make potentially difficult and costly system modifications.

Faced with the need to cut costs, the Office of Management and Budget reduced AES' 1990 budget request by 82 percent, from about \$110 million to \$19.5 million. Treasury officials agreed that the project's funding should be reduced, noting that the AES project was badly managed and lacked clear direction. IRS intends to restructure the program and seek increased funding in future years.

We believe the budget reductions to the AES project are appropriate, given the system development problems, the lack of tangible benefits, and the unresolved integration issues. Before additional investments are made in the current AES project, IRS should resolve AES' development problems, demonstrate its benefits, and plan for integration with Tax System Modernization.

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Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions at this time.