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IRS SYSTEMS SECURITY AND FUNDING

Employee Browsing Not Being Addressed Effectively and Budget Requests for New Systems Development Not Justified

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Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify on Internal Revenue Service (IRS) employees' electronic browsing of taxpayer files, as well as IRS' fiscal years 1998 and 1999 budget requests for tax systems modernization (TSM) development currently before this Subcommittee.

On April 8, 1997, we issued a report disclosing many serious computer security weaknesses at IRS.¹ These weaknesses make IRS computer resources and taxpayer data unnecessarily vulnerable to external threats, such as natural disasters and people with malicious intentions. They also expose taxpayer data to internal threats, such as employees accessing taxpayer files for purposes unrelated to their jobs (for example, reading the files of celebrities or neighbors) or making unauthorized changes to taxpayer data, either inadvertently or deliberately for personal gain (for example, to initiate unauthorized refunds or abate­ments of tax). Such unauthorized and improper browsing of taxpayer records has been the focus of considerable attention in recent years. Nevertheless, our report shows that IRS is not effectively addressing the problem. IRS still does not effectively monitor employee activity, accurately record browsing violations, consistently punish offenders, or widely publicize reports of incidents detected and penalties imposed.

Compounding IRS' serious and persistent computer security and employee browsing problems are equally serious and persistent TSM management and technical problems that must be corrected if IRS is to effectively invest in TSM. IRS is requesting \$1.131 billion in fiscal years 1998 and 1999 for TSM development and deployment. However, IRS does not know how it will spend this \$1.131 billion and has not yet corrected the management and technical problems that IRS has acknowledged have resulted in hundreds of millions of dollars being wasted thus far on TSM. This is inconsistent with the Government Performance and Results Act (GPRA) of 1993 and the Clinger-Cohen Act of 1996, which require that information technology investments be supported by convincing business case analyses and disciplined management and technical processes.

¹IRS Systems Security: Tax Processing Operations and Data Still at Risk Due to Serious Weaknesses (GAO/AIMD-97-49, April 8, 1997).

IRS Is Not Effectively Addressing Electronic Browsing

Employee electronic browsing of taxpayer records is a long-standing problem at IRS. We reported in September 1993 that IRS did not adequately (1) restrict access by computer support staff to computer programs and data files or (2) monitor the use of these resources by computer support staff and users.² As a result, personnel who did not need access to taxpayer data could read and possibly use this information for fraudulent purposes. Also, unauthorized changes could be made to taxpayer data, either inadvertently or deliberately for personal gain (for example, to initiate unauthorized refunds or abatements of tax). In August 1995, we reported that the Service still lacked sufficient safeguards to prevent or detect unauthorized browsing of taxpayer information.³

To address employee browsing, IRS developed the Electronic Audit Research Log (EARL), an automated tool to monitor and detect browsing on the Integrated Data Retrieval System (IDRS).⁴ IRS has also taken legal and disciplinary actions against employees caught browsing. However, as our April 1997 report points out, EARL has shortcomings that limit its ability to detect browsing. In addition, IRS does not have reliable, objective measures for determining whether or not the Service is making progress in reducing browsing. Further, IRS facilities inconsistently (1) review and refer incidents of employee browsing, (2) apply penalties for browsing violations, and (3) publicize the outcomes of browsing cases to deter other employees from browsing.

EARL's Ability to Detect Browsing Is Limited

EARL cannot detect all instances of browsing because it only monitors employees using IDRS. EARL does not monitor the activities of IRS employees using other systems, such as the Distributed Input System, the Integrated Collection System, and the Totally Integrated Examination System, which are also used to create, access, or modify taxpayer data. In addition, information systems personnel responsible for systems development and testing can browse taxpayer information on magnetic tapes, cartridges, and other files using system utility programs, such as the Spool Display and Search Facility,⁵ which also are not monitored by EARL.

²IRS Information Systems: Weaknesses Increase Risk of Fraud and Impair Reliability of Management Information (GAO/AIMD-93-34, September 22, 1993).

³Financial Audit: Examination of IRS' Fiscal Year 1994 Financial Statements (GAO/AIMD-95-141, August 4, 1995).

⁴IDRS is the primary computer system IRS employees use to access and adjust taxpayer accounts.

⁵This utility enables a programmer to view a system's output, which may contain investigative or taxpayer information.

Further, EARL has some weaknesses that limit its ability to identify browsing by IDRS users. For example, because EARL is not effective in distinguishing between browsing activity and legitimate work activity, it identifies so many potential browsing incidents that a subsequent manual review to find incidents of actual browsing is time-consuming and difficult. IRS is evaluating options for developing a newer version of EARL that may better distinguish between legitimate activity and browsing.

IRS Progress in Reducing and Disciplining Browsing Cases Is Unclear

IRS' management information systems do not provide sufficient information to describe known browsing incidents precisely or to evaluate their severity consistently. IRS personnel refer potential browsing cases to either the Labor Relations or Internal Security units, each of which records information on these potential cases in its own case tracking system. However, neither system captures sufficient information to report on the total number of unauthorized accesses. For example, neither system contains enough information on each case to determine how many taxpayer accounts were inappropriately accessed or how many times each account was accessed. Without such information, IRS cannot measure whether it is making progress from year to year in reducing browsing.

A recent report by the IRS EARL Executive Steering Committee⁶ shows that the number of browsing cases closed has fluctuated from a low of 521 in fiscal year 1991 to a high of 869 in fiscal year 1995.⁷ However, the report concluded that the Service does not consistently count the number of browsing cases and that "it is difficult to assess what the detection programs are producing . . . or our overall effectiveness in identifying IDRS browsing."

Further, the committee reported that "the percentages of cases resulting in discipline has remained constant from year to year in spite of the Commissioner's 'zero tolerance' policy." IRS browsing data for fiscal years 1991 to 1995 show that the percentage of browsing cases resulting in IRS' three most severe categories of penalties (i.e., disciplinary action, separation, and resignation/retirement) has ranged between 23 and 34 percent, with an average of 29 percent.⁸

⁶Electronic Audit Research Log (EARL) Executive Steering Committee Report (September 30, 1996).

⁷We did not verify the accuracy and reliability of these data.

⁸The mix among these three categories has remained relatively constant each year with disciplinary action accounting for the vast majority of penalties.

Browsing Incidents Are Reviewed, Referred, Disciplined, and Publicized Inconsistently

IRS processing facilities do not consistently review and refer potential browsing cases. The processing facilities responsible for monitoring browsing had different policies and procedures for identifying potential violations and referring them to the appropriate unit within IRS for investigation and action. For example, at one facility, the analysts who identify potential violations referred all of them to Internal Security, while staff at another facility sent some to Internal Security and the remainder to Labor Relations.

IRS has taken steps to improve the consistency of its review and referral process. In June 1996, it developed specific criteria for analysts to use when making referral decisions. A recent report by the EARL Executive Steering Committee stated that IRS had implemented these criteria nationwide. Because IRS was in the process of implementing these criteria during our work, we could not validate their implementation or effectiveness.

IRS facilities are not consistently disciplining employees caught browsing. After several IRS directors raised concerns that field offices were inconsistent in the types of discipline imposed in similar cases, IRS' Western Region analyzed fiscal year 1995 browsing cases for all its offices and found inconsistent treatment for similar types of offenses. For example, one employee who attempted to access his own account was given a written warning, while other employees in similar situations, from the same division, not only did not receive a written warning but were not counseled at all.

The EARL Executive Steering Committee reported widespread inconsistencies in the penalties imposed in browsing cases. For example, the committee's report showed that for fiscal year 1995, the percentage of browsing cases resulting in employee counseling ranged from a low of 0 percent at one facility to 77 percent at another. Similarly, the report showed that the percentage of cases resulting in removal ranged from 0 percent at one facility to 7 percent at another. For punishments other than counseling or removal (e.g., suspension), the range was between 10 percent and 86 percent.

IRS facilities did not consistently publicize the penalties assessed in browsing cases to deter such behavior. For example, we found that one facility never reported disciplinary actions. However, another facility reported the disciplinary outcomes of browsing cases in its monthly newsletter. By inconsistently and incompletely reporting on penalties

assessed for employee browsing, IRS is missing an opportunity to more effectively deter such activity.

In summary, although IRS has taken some action to detect and deter browsing, it is still not effectively addressing this area of continuing concern because (1) it does not know the full extent of browsing and (2) it is addressing cases of browsing inconsistently. Because of this, our April report recommends that the IRS Commissioner (1) ensure that IRS completely and consistently monitors, records, and reports the full extent of electronic browsing and (2) report IRS' progress in eliminating browsing in its annual budget submission. IRS has concurred with these recommendations and stated that it will implement them. We plan to monitor its progress in doing so.

Fiscal Years 1998 and 1999 TSM Budget Requests Not Justified

Recent legislation, such as GPRA and the Clinger-Cohen Act, require that information technology investments be supported by accurate cost data and convincing cost-benefit analyses. However, IRS' fiscal years 1998 and 1999 TSM budget requests, which combined total \$1.131 billion, do not include credible, verifiable justifications. Exacerbating this problem is the fact that the systems modernization continues to be at risk due to uncorrected management and technical weaknesses⁹ that we first reported in July 1995.¹⁰ Such an approach to modernization spending is exactly the cause of IRS' past modernization failures, and giving IRS more money under these circumstances not only undermines the objectives of GPRA and the Clinger-Cohen Act, but also increases the risk of more money being wasted.

Budget Request for Fiscal Year 1998 Systems Development Not Justified

The Clinger-Cohen Act, GPRA, and OMB Circular No. A-11 and supporting memoranda require that information technology investments be supported by accurate cost data and convincing cost-benefit analyses. However, IRS has not prepared such analyses to support its fiscal year 1998 request of \$131 million for system development. The budget request states that IRS

⁹GAO High Risk Series, IRS Management ([GAO/HR-97-8](#), February 1997); Tax Systems Modernization: Actions Underway But Management and Technical Weaknesses Not Yet Corrected ([GAO/T-AIMD-96-165](#), September 10, 1996); Tax Systems Modernization: Actions Underway But IRS Has Not Yet Corrected Management and Technical Weaknesses ([GAO/AIMD-95-106](#), June 7, 1996); Tax Systems Modernization: Management and Technical Weaknesses Must Be Overcome To Achieve Success ([GAO/T-AIMD-96-75](#), March 26, 1996); and Tax Systems Modernization: Management and Technical Weaknesses Must Be Corrected If Modernization Is to Succeed ([GAO/AIMD-95-156](#), July 25, 1995).

¹⁰Tax Systems Modernization: Management and Technical Weaknesses Must Be Corrected If Modernization Is to Succeed ([GAO/AIMD-95-156](#), July 25, 1995).

does not know how it plans to spend these funds because its modernization systems architecture and system deployment plan have not yet been finalized. These efforts are scheduled for completion in May 1997 and are intended to guide future systems development. According to IRS budget officials, \$131 million was requested for fiscal year 1998 because it was approximately the same amount IRS received in fiscal year 1997 for system development.

No Justification to Support Information Technology Investments Account Requests for Fiscal Years 1998 and 1999

The administration, on IRS' behalf, is proposing to establish an Information Technology Investments Account to fund future modernization investments at IRS. It is seeking \$1 billion—\$500 million in each of fiscal years 1998 and 1999—for “yet-to-be-specified” development efforts. According to IRS' request, the funds are to support acquisition of new information systems, any expenditures from the account will be reviewed and approved by the Department of the Treasury's Modernization Management Board, and no funds will be obligated before July 1, 1998.

The Clinger-Cohen Act, GPRA, and OMB Circular No. A-11 and supporting memoranda require that, prior to requesting multiyear funding for capital asset acquisitions, agencies develop accurate, complete cost data and perform thorough analyses to justify the business need for the investment. For example, agencies need to show that needed investments (1) support a critical agency mission, (2) are justified by a life-cycle-based cost-benefit analysis, and (3) have cost, schedule, and performance goals.

IRS has not prepared such analyses for its fiscal years 1998 and 1999 investment account request. Instead, IRS and Treasury officials stated that during executive-level discussions, they estimated that they would need about \$2 billion over the next 5 years. This estimate was not based on analytical data or derived using formal cost estimating techniques. According to Office of Management and Budget (OMB) officials responsible for IRS' budget submission, the request was reduced to \$1 billion over 2 years because they perceived the lesser amount as being more palatable to the Congress. These officials also told us that they were not concerned about the precision of the estimate because their first priority is to “earmark funds” in the fiscal years 1998 and 1999 budgets so that funds will be available when IRS eventually determines how it wants to modernize its systems.

In 1995 we made over a dozen recommendations to the Commissioner of Internal Revenue to address systems modernization management and

technical weaknesses. We reported in 1996 that IRS had initiated many activities to improve its modernization efforts, but had not yet fully implemented our recommendations.¹¹ Since that time, IRS has continued to take steps to address our recommendations and respond to congressional direction. While we recognize these actions as well as actions taken by Treasury to address these problems, we remain concerned. Much remains to be done to implement essential improvements in IRS' modernization efforts. IRS is still in the process of putting in place disciplined processes for designing and developing new systems, has not yet completed its systems architecture, and has no justification for the funding it has requested.

Given IRS' poor track record delivering cost beneficial TSM systems, persisting weaknesses in both software development and acquisition capabilities, and the lack of justification and analyses for over \$1 billion in proposed system expenditures, we believe that the Congress should not fund these requests until the management and technical weaknesses in IRS' modernization program are resolved and the required justifications are completed.

Mr. Chairman, this concludes my statement. Lynda Willis, Director, Tax Policy and Administration Issues, and I will be happy to respond to any questions you or Members of the Subcommittee might have at this time.

¹¹Tax Systems Modernization: Actions Underway But IRS Has Not Yet Corrected Management and Technical Weaknesses ([GAO/AIMD-95-106](#), June 7, 1996).

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