Opportunities Exist to Improve Tax Software Packages

January 2005

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DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

INSPECTOR GENERAL
for TAX
ADMINISTRATION

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MEMORANDUM FOR CHIEF INFORMATION OFFICER
COMMISSIONER, WAGE AND INVESTMENT DIVISION

Margaret E. Begg

FROM: *(for)* Gordon C. Milbourn III
Assistant Inspector General for Audit
(Small Business and Corporate Programs)

SUBJECT: Final Audit Report - Opportunities Exist to Improve Tax Software Packages (Audit # 200440028)

This report presents the overall results of our review to determine whether the Internal Revenue Service (IRS) has an effective process to ensure tax return preparation software developers are provided with accurate tax law specifications. This review is a follow-up to a Treasury Inspector General for Tax Administration report issued in December 2003,[1] in which we indicated that some Tax Year (TY) 2001 and TY 2002 tax returns prepared by the IRS would not allow or incorrectly allowed credits and deductions taxpayers may or may not have been entitled to receive.

In summary, the Congress passed the IRS Restructuring and Reform Act of 1998,[2] in part, to address paperless tax return filing and set a goal for the IRS to have at least 80 percent of all tax returns electronically filed (*e-filed*)[3] by the year 2007. To date, the IRS has made significant progress attracting taxpayers to *e-file*. Specifically, taxpayers participating in *e-file* have increased from approximately 19 million in 1997 to 60.5 million in 2004 (through July). For the 2004 Filing Season,[4] the IRS promoted

[1] *Improvements Are Needed to Ensure Tax Returns Are Correctly Prepared at Taxpayer Assistance Centers* (Reference Number 2004-40-025, dated December 2003).
[2] Pub. L. No. 105-206, 112 Stat. 685 (codified as amended in scattered sections of 2 U.S.C., 5 U.S.C. app., 16 U.S.C., 19 U.S.C., 22 U.S.C., 23 U.S.C., 26 U.S.C., 31 U.S.C., 38 U.S.C., and 49 U.S.C.).
[3] *E-file* is a way to electronically file a tax return with the IRS using an authorized IRS *e-file* provider or personal computer.
[4] The filing season is the period from January through mid-April when most individual income tax returns are filed.

e-filing as "fast, safe, and accurate" to American taxpayers both in the printed and electronic media. Also, for the past two filing seasons, the IRS has promoted an easy, no-cost option for taxpayers to file their tax returns online through its Internet web site, IRS.gov.

The IRS uses electronic file specifications to program its computers used to prepare and process *e-filed* tax returns. The IRS also publishes the electronic file specifications for the tax return preparation software developers to update their tax return preparation software. This ensures tax returns prepared by the software will be formatted correctly, accurate, and accepted for processing by the IRS. The IRS appropriately updated the electronic file specifications with TY 2003 tax law provisions that included changes to the capital gains and dividend rates and education incentives known as the Hope and lifetime learning credits.

However, inaccurate electronic file (programming) specifications used to program and process TYs 2001 and 2002 tax returns caused systemic errors in some software used to *e-file* certain tax returns. The specifications did not include the qualifying relationship of a brother, sister, niece, or nephew necessary to claim the Child Tax Credit (CTC)[5] and the Earned Income Tax Credit (EITC).[6] This happened because either the IRS computer systems or the electronic file specifications provided to tax return preparation software developers did not contain these relationships. The IRS stated that reviews were done on the electronic file specifications; however, documentation was not sufficient to show that reviews relating to these errors were conducted. Also, the IRS could not provide us with any written procedures and guidelines to ensure electronic file specifications are correctly updated and consistent between those loaded on IRS computers used to process *e-filed* tax returns and those provided to software developers.

The IRS tests all tax return preparation software used to *e-file* individual tax returns with the IRS. The testing is intended to ensure *e-filed* tax returns can be initially processed much like tax returns submitted on paper. However, the tests are not created to check for misapplication of the tax law. Our tests of 5 TY 2003 tax return preparation software packages resulted in 4 (80 percent) of the 5 packages incorrectly preparing tax returns based on facts we presented in the tests. In addition, the tax software packages' own internal validity checks did not identify the errors.

Between January and July 2004, 60.5 million taxpayers *e-filed* their tax returns. However, based on the results of our tests, the risk increases that some *e-filed* tax returns may not have been correctly prepared because of the IRS' current process for testing tax return preparation software. We recommended the Commissioner, Wage and Investment (W&I) Division, develop procedures to ensure the electronic file specifications are reviewed for accuracy and consistency. We also recommended the

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[5] The CTC is a refundable credit taxpayers may take to reduce the amount of tax up to $600 in TYs 2001 and 2002 for each qualifying child.
[6] The EITC is a refundable credit established to offset the impact of Social Security taxes on low-income families and encourage them to seek employment rather than welfare.

Chief Information Officer and the Commissioner, W&I Division, conduct testing, in addition to the Participants Acceptance Testing System (PATS)[7] and System Acceptability Test (SAT),[8] on any tax return preparation software selected by the IRS before it is to be used by its employees and volunteers to prepare tax returns.

Management's Response: The IRS agreed with our first recommendation and will establish written procedures for the reviews of file specifications and develop a plan to compare the file specifications used by the IRS and provided to software developers.

However, the IRS did not agree with our second recommendation and believes it would not be feasible to perform additional testing on the tax return preparation software without impeding the availability of the software products for IRS employees and volunteers and delaying the processing of tax returns. In addition, the IRS cannot contractually require that software developers place their products under the IRS' process for more stringent testing/control. Management's complete response to the draft report is included as Appendix V.

Office of Audit Comment: We continue to believe that, when a taxpayer has an IRS employee or volunteer prepare a tax return, he or she expects that tax return to be correct. Employees and volunteers receive tax law training, but both rely on the tax preparation software to interpret information input into the program and prepare an accurate tax return. We acknowledge that the IRS tests all software to ensure *e-filed* tax returns are correctly formatted and meet electronic filing specifications. However, conducting additional testing to ensure tax preparation software used by IRS employees and volunteers is error-free will reduce the risk that *e-filed* tax returns are inaccurate. In its response, the IRS states one of the electronic filing goals is that tax returns prepared with software are accurately computed.

The IRS also states it would not be feasible to perform testing on the tax return preparation software used by its employees and volunteers without delaying the processing of tax returns. However, during this review, the IRS used our scenarios and found that 7 (54 percent) of the 13 tax return preparation software packages available on IRS.gov prepared inaccurate tax returns. We still believe the IRS has an obligation to perform additional testing, to include conducting risk assessments and testing those provisions that create the greatest risks, on the software selected for use by its employees and volunteers. While we still believe our recommendation is worthwhile, we do not intend to elevate our disagreement concerning this matter to the Department of the Treasury for resolution.

Copies of this report are also being sent to the IRS managers affected by the report recommendations. Please contact me at (202) 622-6510 if you have questions or Michael R. Phillips, Assistant Inspector General for Audit (Wage and Investment Income Programs), at (202) 927-0597.

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[7] The PATS is a requirement for all tax return preparation software developers and transmitters planning to transmit *e-filed* individual tax returns to the IRS.
[8] The SAT is the internal testing of a system, such as the Electronic Filing System, to find and resolve any problems with the system prior to using it.

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Background

The Congress has required the Internal Revenue Service (IRS) to reach a goal of having 80 percent of all tax and information returns electronically filed (e-*filed)*[1] by the year 2007. To date, the IRS has made significant progress in attracting taxpayers to *e-file* and continues to promote *e-filing* as "fast, safe, and accurate." Taxpayers participating in *e-file* have increased from approximately 19 million in 1997 to 60.5 million in 2004.[2]

As part of the IRS' strategic plan, its goal is to continue to improve electronic filing, payment, and communication services via the Internet. To help reach this goal for the past two filing seasons,[3] the IRS has provided and promoted free online tax preparation and *e-filing* through commercial tax return preparation companies located on its Internet web site, IRS.gov. This service is made available to at least 60 percent of the nation's taxpayers.[4] Eligibility criteria are generally based on income, age, state residency, or military service. In addition, policies related to customer service support options, privacy, and what taxpayers should do if their tax returns are rejected (i.e., not accepted for processing by the IRS because of errors) are made available to taxpayers.

The Wage and Investment (W&I) Division and the Modernization and Information Technology Services (MITS) organization are responsible for creating and revising the electronic file specifications (the criteria) used to program the IRS computers to electronically accept and process tax returns. The W&I Division identifies the tax law changes requiring revisions to the electronic file specifications. It provides an information request to the MITS organization outlining the tax law changes; the MITS organization uses this information to revise the electronic file specifications.

The electronic file specifications are also published and made available to the tax return preparation software

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[1] *E-file* is a way to electronically file a tax return with the IRS using an authorized IRS *e-file* provider or personal computer.
[2] As of August 1, 2004.
[3] The filing season is the period from January through mid-April when most individual income tax returns are filed.
[4] Taxpayers access this service through IRS.gov, but file their returns through the commercial tax return preparation companies.

developers to update their tax return preparation software. This ensures the tax returns prepared by the software will be formatted correctly, accurate, and accepted for processing by the IRS. The IRS will not process (rejects) *e-filed* tax returns that are not submitted in the correct format. The IRS identifies the source of the problem using a system of error reject codes that identify why a tax return rejected. For Tax Year (TY) 2003 tax returns, there were 662 defined error reject codes.

The MITS organization, which includes the office of Electronic Tax Administration (ETA), administers the E-File Program and provides the electronic mechanisms needed for taxpayers, preparers, and practitioners to *e-file* tax returns and make payments. The MITS organization also oversees the *e-filing* systems that receive and process tax returns electronically, including the transmission and validation of the tax returns. The Submission Processing Office in the W&I Division receives, processes, and archives all tax and information returns; processes refunds; and accounts for all tax revenues.

The IRS uses the Participants Acceptance Testing System (PATS) before the live processing of tax returns to ensure (1) returns are transmitted in the correct format and meet the IRS' electronic file specifications, (2) returns have few validation or math errors, (3) required fields post to the main IRS computer system, and (4) developers and transmitters understand the mechanics of IRS *e-file*. The PATS is a requirement for all tax return preparation software developers and transmitters[5] planning to transmit *e-filed* individual tax returns to the IRS.

For TY 2003, the IRS required software developers to choose from 37 return scenarios to test their tax return preparation software, depending on the type(s) of returns they prepare and/or transmit. The return scenarios included facts needed to prepare forms and schedules accepted for *e-filing*. The IRS checked each test return against an answer key to ensure the tax return was in the correct format and correctly calculated the expected refund or tax liability.

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[5] Transmitters receive data from clients and reformat the data, if necessary, to meet IRS requirements. Transmitters may also transmit tax returns to the IRS.

This review is a follow-up to a Treasury Inspector General for Tax Administration (TIGTA) report issued in December 2003,[6] in which we indicated that certain TYs 2001 and 2002 tax returns prepared by IRS employees might have been incorrect due to systemic errors in tax return preparation software. Specifically, the software would not allow or incorrectly allowed credits and deductions taxpayers may or may not have been entitled to receive. During that review, we alerted IRS management to the errors. We did not make any recommendations in that report to address the problem. Instead, we stated we would conduct a separate review to evaluate the IRS' process for ensuring tax return preparation software used to prepare tax returns is accurate.

This audit was performed at the IRS Headquarters in Washington, D.C., and Lanham, Maryland, in the offices of ETA and Submission Processing during the period October 2003 through September 2004. The audit was conducted in accordance with *Government Auditing Standards*. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to the report are listed in Appendix II.

Electronic File Specifications Were Correctly Updated With Tax Year 2003 Tax Law Provisions

The IRS correctly incorporated the tax law changes into the electronic file specifications for all six of the TY 2003 tax law provisions we reviewed.[7] These provisions included changes to the capital gains and dividend rates, the health coverage tax credit, and education incentives known as the Hope and lifetime learning credits. For example, changes were made to ensure taxpayers would receive the reduction in capital gains rates from the 10 and 20 percent rates on the adjusted net capital gain to 5 and 15 percent, respectively. The new rates were effective in taxable years ending on or after May 6, 2003, and beginning before January 1, 2009. Also, changes were made to allow certain taxpayers to claim a refundable tax credit of 65 percent of their health insurance premiums. As stated, it is important that tax law changes are incorporated into the electronic file specifications to ensure tax return preparation software

[6] *Improvements Are Needed to Ensure Tax Returns Are Correctly Prepared at Taxpayer Assistance Centers* (Reference Number 2004-40-025, dated December 2003).
[7] See Appendix IV for the tax law provisions reviewed.

produces returns that are formatted correctly, accurate, and accepted by the IRS for processing.

Inaccurate Electronic File Specifications Caused Systemic Errors for Tax Years 2001 and 2002 E-Filed Tax Returns

Taxpayers that qualified for the Child Tax Credit (CTC)[8] and Earned Income Tax Credit (EITC)[9] for TYs 2001 and/or 2002 might not have received the credits if the qualifying child(ren) was a brother, sister, niece, or nephew. In addition, certain *e-filed* tax returns were rejected because of CTC or EITC errors. This happened because either the IRS computer systems or the electronic file specifications provided to tax return preparation software developers did not contain these relationships.

Electronic file specifications did not include all definitions of a qualifying child for the CTC when processing TY 2001 *e-filed* tax returns

The electronic file specifications the IRS used to program its computer systems to process TY 2001 tax returns allowed taxpayers to claim the CTC only for a dependent who was a son, daughter, grandchild, or foster child. However, the electronic file specifications provided to tax return preparation software developers correctly instructed programmers to also allow the CTC for the additional dependent relationships of brother, sister, niece, or nephew. Therefore, if taxpayers *e-filed* their tax returns and claimed the CTC with the qualifying dependent being a brother, sister, niece, or nephew, the IRS rejected the tax returns because its computers were not programmed to accept these relationships.

According to tax instructions used to develop the file specifications, to claim the CTC, the taxpayer must have a qualifying child who could be claimed as a dependent, was under age 17 at the end of the tax year, and was a United States (U.S.) citizen or resident.[10] Specifically, a dependent included:

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[8] The CTC is a refundable credit taxpayers may take to reduce the amount of tax up to $600 in TYs 2001 and 2002 for each qualifying child.
[9] The EITC is a refundable credit established to offset the impact of Social Security taxes on low-income families and encourage them to seek employment rather than welfare.
[10] In addition to these restrictions, the CTC has certain income limitations.

- A child, grandchild, great-grandchild, stepchild, etc.
- A brother, sister, half-brother, half-sister, stepbrother, or stepsister; a brother or sister of the taxpayer's father or mother; or a son or daughter of the taxpayer's brother or sister.
- A foster child who must live with the taxpayer as a member of his or her household for the entire year.

Electronic file specifications did not include all definitions of a qualifying child for the EITC when processing TY 2001 *e-filed* tax returns

The electronic file specifications provided to tax return preparation software developers and those used to program the IRS computer systems did not instruct programmers to include the EITC qualifying child relationship of a brother, sister, niece, or nephew. Instead, IRS computers were programmed to group these relationships under the foster child instead of listing them separately. As a result, the IRS rejected tax returns for taxpayers that *e-filed* tax returns claiming the EITC for these qualifying relationships.

According to tax instructions used to develop the file specifications, to claim the EITC, a taxpayer must have a qualifying child who lived with the taxpayer in the U.S. for more than one-half of the year and, at the end of the year, was under age 19, or was under age 24 and a student, or was permanently and totally disabled (regardless of age). If a qualifying child was a foster child, he or she must have lived with the taxpayer all year. For TY 2001, a qualifying child for the EITC was:

- A son, daughter, adopted child, grandchild, or stepchild.
- A foster child. The foster child is any child the taxpayer cared for as his or her own and who is one of the following:
  - (a) A brother, sister, stepbrother, or stepsister.
  - (b) A descendant (such as a child, including an adopted child) of the taxpayer's brother, sister, stepbrother, or stepsister.

(c) A child placed with the taxpayer by an authorized placement agency.

Correction of the electronic file specification errors was not completely effective and timely

A tax return preparation software developer identified the EITC error and alerted the IRS. When the IRS was researching and correcting that error, it identified the CTC error. On December 5, 2002, the IRS revised the electronic file specifications to include the qualifying relationships of brother, sister, niece, and nephew for the EITC. The IRS published the corrections so tax return preparation software developers could revise their software in time to ensure *e-filed* TY 2002 tax returns would be correctly processed for these relationships. However, the IRS did not publish revised electronic file specifications for these same relationships for the CTC error until January 7, 2003. Since the CTC corrections occurred after the software was already released for use, a software update was necessary.

Typically, software updates are made available online to anyone using the software. Before a user's tax return is finalized or transmitted to the IRS, the software will generate a message suggesting that the user determine whether updates to the software are available. If updates are available, they are downloaded to the user's computer system. These updates could include changes initiated by the tax return preparation software developer to improve the software or changes initiated by the IRS because of revisions to the electronic file specifications or changes in the tax law.

Some tax return preparation software developers might have included the relationships of a brother, sister, niece, or nephew to claim the CTC and EITC in their return tax preparation software. Tax returns *e-filed* using these software packages might not have been rejected. However, for those tax return preparation software developers that did not, the tax returns would have been rejected.

The TYs 2001 and 2002 software used by the IRS at the Taxpayer Assistance Centers (TAC)[11] and Volunteer Income Tax Assistance (VITA)[12] sites did not include the qualifying relationships of a brother, sister, niece, or nephew to claim the CTC and EITC. This software was not adequately updated. The TY 2002 qualifying relationships were updated for the EITC but not the CTC. The TY 2001 qualifying relationships were not updated for either.

The tax return preparation software developer that provided the software used by the IRS stated that the January 7, 2003, revised electronic file specifications came too late for it to revise its software; it had already released numerous versions, including the one the IRS was using. The tax return preparation software developer instead offered a solution that would require IRS employees and VITA Program volunteers to manually override the software.

The IRS issued a memorandum to its employees and volunteers on February 25, 2003, instructing them to ask taxpayers if they cared for a brother, sister, niece, or nephew as their own child. If taxpayers answered yes, the employees and volunteers were instructed to manually override the TY 2002 software to correctly apply the CTC. Employees and volunteers were also advised that they, ". . . may want to review returns that were completed prior to our knowledge of this problem and advise taxpayers accordingly if an amended return is needed. The number of taxpayers affected by this should be minimal per site."

Since the IRS does not maintain a listing of rejected *e-filed* returns, we are unable to identify all taxpayers affected by the errors identified above. However, we have discussed with management the necessity of ensuring IRS employees and VITA Program volunteers are reminded to use the CTC manual solution when preparing TY 2002 returns for taxpayers that claim their brother, sister, niece, or nephew.

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[11] The TACs are approximately 400 IRS offices located across the U.S. that exist primarily to serve taxpayers that seek face-to-face tax assistance.

[12] The VITA Program provides free Federal tax return preparation and *e-filing* to certain individual taxpayers, including low-income, elderly, disabled, and limited-English proficient taxpayers.

Tests and current controls did not identify the inconsistencies found in the electronic file specifications

The PATS and System Acceptability Test (SAT)[13] used to test the electronic file specifications did not identify the TYs 2001 and 2002 CTC and EITC errors in the electronic file specifications. Internal guidelines require reviews and approvals to be completed during the development of the electronic file specifications. Any revisions are to be discussed and tested to ensure compliance with program objectives. In addition, employees stated that reviews are conducted and are standard operating procedures. However, documentation was not sufficient to show that reviews were conducted on the electronic file specifications after their development or relating to the errors identified in this review.

Also, the IRS could not provide us with any written procedures and guidelines to ensure electronic file specifications are correctly updated and consistent between those loaded on IRS computers used to process *e-filed* tax returns and those provided to tax return preparation software developers. This increases the risk that returns prepared using tax return preparation software are incorrect or may be rejected when filed. Government Accountability Office standards require that agencies assess and manage risks associated with actions they take to achieve their goals. The guidelines include reviews as a method to assess risks.

Effect on taxpayers and the IRS

Because of the issues identified above, tax returns prepared using the tax return preparation software (they can be either *e-filed* or submitted on paper) could be incorrect. In addition, taxpayers might have submitted their tax returns on paper after their *e-filed* tax returns were rejected because of the CTC or EITC errors.

Neither the IRS nor we can determine the number of taxpayers that filed tax returns that included a CTC and/or EITC claim for the qualifying relationships affected because the IRS does not retain the complete records of the rejected

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[13] The SAT is the internal testing of a system, such as the Electronic Filing System, to find and resolve any problems with the system prior to using it.

tax returns. As a result, we cannot quantify the impact on individual taxpayers (e.g., the number of qualified taxpayers who were denied the credit(s) when *e-filing* or, after having their tax returns rejected, had to submit their returns on paper to receive the credit(s)). However, the 2000 Census shows that more than 3 million brothers and sisters made up the American family household. Another 4.9 million "other relatives" lived in family households.

We examined the IRS' TYs 2001 and 2002 databases of rejected *e-filed* returns. We identified 56,143 taxpayers whose *e-filed* TY 2001 tax returns were rejected because of CTC and EITC errors. Of these, 7,418 (13 percent) taxpayers resubmitted their tax returns on paper. In TY 2002, 7,881 (14 percent) of 55,926 taxpayers also resubmitted their tax returns on paper after their *e-filed* tax returns were rejected for the same errors. These returns were rejected because of age, birth date, and dependent relationship issues. Some of the rejected tax returns were resubmitted from 2 to 41 times.

According to the IRS, it costs $2.86 to process tax returns submitted on paper compared to $.56 to process an *e-filed* return. Instead of costing the IRS $4,154 in TY 2001 and $4,413 in TY 2002 to electronically process the tax returns, we estimate it cost the IRS $21,215 and $22,540, respectively, to process the returns submitted on paper. Although these numbers are minimal when compared to the approximately 60.5 million *e-filed* returns, our analyses were limited to 2 of 662 reject codes that best captured the relationship errors we identified. These trends could hinder the IRS' efforts to achieve the Congressionally mandated goal of 80 percent of all tax returns *e-filed* by 2007.

Recommendation

The Commissioner, W&I Division, should:

1. Develop procedures to ensure the electronic file specifications are reviewed for accuracy and consistency. The review should include a comparison of the file specifications used by the IRS and the file specifications provided to the tax return preparation software developers to ensure the instructions are

accurately interpreted and the specifications are correct and consistent.

Management's Response: The Director, Submission Processing, W&I Division, will develop a desk guide that will establish written procedures for these reviews. The Director will also work with the MITS organization to document existing practices of coordinating the review of file specifications as well as develop a cross-reference plan to compare the file specifications used by the IRS and provided to software developers.

Current Testing of Tax Preparation Software Does Not Always Identify Misapplication of the Tax Law

The PATS testing for tax return preparation software is intended to ensure *e-filed* tax returns can be initially processed much like tax returns submitted on paper. The testing includes scenarios to ensure the correct application of the law. For example, the tests include validating certain dependent relationships claimed by taxpayers to ensure they qualify for credits and validating the filing statuses used to calculate the amount of taxes owed. All facts in the scenarios meet tax law requirements. However, the test scenarios are not created to test for misapplication of the tax law or to test for all situations and conditions relating to the laws. The scenarios do not include facts that conflict with the law and would prevent a taxpayer from receiving a credit.

For example, we tested five TY 2003 tax return preparation software packages. Four of the five were accessible on IRS.gov and the remaining package was used by the IRS' TACs and VITA sites. We tested these packages to determine if they correctly applied the tax laws involving income reporting, filing status, exemptions, and the EITC and CTC. Four (80 percent) of the 5 packages incorrectly prepared the tax returns based on the facts TIGTA auditors presented in scenarios to test the software. Additionally, the validity checks included in the four software packages did not identify these errors. Using 6 scenarios with income ranging from $25,000 to $75,000 for taxpayers filing as Single or Head of Household, we found:

- Four (80 percent) of the 5 software packages incorrectly allowed tax benefits to taxpayers that filed as Head of Household and claimed as a dependent a brother or sister who lived in the home for 4 months. The law requires a child to live in the home more than one-half of the year to qualify for Head of Household.

- Four (80 percent) of the 5 software packages incorrectly allowed taxpayers to receive dependency exemptions and the CTC for foster children living in the home less than 12 months. The law requires that a foster child live in the home 12 months to be claimed as a dependent. Current Census data show that, in Calendar Year 2000, more than 6 million "nonrelatives" lived in family households. Nonrelatives include foster children.
- Two (40 percent) of the 5 software packages did not correctly calculate estimated tax penalties for taxpayers whose income was $75,000. Generally, a taxpayer owes an estimated tax penalty if the total of his or her withholding and estimated tax payment(s) is not at least 90 percent of the tax for the current tax year or 100 percent of the prior year's tax, whichever is smaller.

We shared our test results with two of the four tax return preparation software developers whose software was tested. They confirmed the test results and have taken actions to correct the problems. The corrections will be implemented for the 2005 Filing Season. At the request of the IRS, we did not contact the other two tax return preparation software developers directly but provided our results to the IRS for it to contact the developers. We do not know what actions, if any, the other two tax return preparation software developers have taken or plan to take to correct the identified problems.

We also provided our six test scenarios to the IRS. The IRS chose 2 of the 6 test scenarios and, after making modifications to our test scenarios, found the same or similar problems in 7 (54 percent) of the 13 tax return preparation software packages it tested.

When programming tax return preparation software, developers have to interpret a myriad of tax law requirements to ensure their software will correctly prepare tax returns. Because of the complexity of the tax law, neither the IRS nor the tax return preparation software developers can test for all situations and conditions. In fact, the IRS advises tax return preparation software developers that, since every conceivable condition cannot be represented in the PATS scenario tests, they may want to test any conditions they feel are appropriate once they have passed the required tests.

However, most taxpayers have limited tax knowledge and rely on the competency of tax return preparers or tax return preparation software. A person or company that prepares a computer program and sells it to a taxpayer to use in preparing the taxpayer's income tax return may be considered an income tax return preparer.[14] All tax return preparers must comply with certain requirements in the actual preparation of a return for a fee, including furnishing a copy of the return to the taxpayer. Failure to satisfy these obligations can result in the imposition of a penalty against the return preparer. Return preparers are also subject to penalties if they act in negligent or intentional disregard of Department of the Treasury or IRS rules and regulations.

The oversight of preparers has been a concern of the National Taxpayer Advocate (NTA). In the NTA 2003 Annual Report to Congress, the NTA expressed concern for the oversight and regulation of tax return preparers, other than attorneys, Certified Public Accountants, and enrolled agents[15] that are already regulated in some form.

Helping taxpayers understand and meet their tax obligations is essential to voluntary compliance. Considering the IRS' goal of having 80 percent of tax returns *e-filed* by 2007, the IRS should develop a program to provide reasonable assurance that tax return preparation software used to *e-file* returns prepares accurate tax returns with the correct amount of tax.

The importance of tax return preparation software will increase as more taxpayers choose to *e-file,* whether they choose to prepare their own tax returns or pay preparers to prepare their tax returns and *e-file*. The complexity of the tax law presents a significant challenge. Testing for all conditions and situations for every tax provision is not

[14] Revenue Ruling 85-189 (1985-2 C.B. 341, 1985-48 I.R.B. 8).
[15] An enrolled agent is a tax professional who has demonstrated special competence in tax matters, applied for enrollment, and been issued an enrollment card.

feasible. However, conducting risk assessments and testing for those provisions creating the greatest risks would help ensure tax returns are prepared correctly and reduce the number of tax returns rejected.

Effect on taxpayers

As of July 2004, there had been a 15.7 percent increase in the number of *e-filed* returns compared to the same period last year, from 52.3 million to 60.5 million. The increase is a positive step toward the IRS accomplishing its Congressionally mandated goal of 80 percent of all tax returns *e-filed* by 2007. However, based on the results of our tests, the risk increases that some of the 60.5 million taxpayers' *e-filed* tax returns may not have been correctly prepared because of the IRS' current process for testing tax return preparation software, resulting in the improper amount of calculated tax.

Recommendation

The Chief Information Officer and the Commissioner, W&I Division, should:

2. Conduct testing, in addition to the PATS and SAT, on any tax return preparation software selected by the IRS before it is used by its employees and volunteers to prepare tax returns to ensure tax returns prepared by the IRS and its volunteers are accurate.

Management's Response: The IRS did not agree with this recommendation and stated it would not be feasible to perform additional testing on the tax return preparation software without impeding the availability of the software products for IRS employees and volunteers and delaying the processing of tax returns. Also, the IRS cannot contractually require that software developers place their products under the IRS configuration management process, where software and documentation baselines must be established and strictly controlled, because this would require delivery to the IRS of all of their programming functional specification and design documentation.

Office of Audit Comment: We continue to believe that, when a taxpayer walks into a TAC or VITA site, he or she expects the IRS employee or volunteer to prepare a correct tax return. Employees and volunteers receive tax law training, but both rely on the tax preparation software to interpret information input into the program and prepare an accurate tax return. We acknowledge that the IRS tests all software to ensure *e-filed* tax returns are correctly formatted and meet electronic filing specifications. However, conducting additional testing to ensure tax preparation software used by IRS employees and volunteers is error-free will reduce the risk that *e-filed* tax returns are inaccurate. In its response, the IRS states one of the electronic filing goals is that tax returns prepared with software are accurately computed.

The IRS also states it would not be feasible to perform testing on the tax return preparation software used by its employees and volunteers without delaying the processing of tax returns. However, during this review, the IRS used our scenarios and found that 7 (54 percent) of the 13 tax return preparation software packages available on IRS.gov prepared inaccurate tax returns. We still believe the IRS has an obligation to perform additional testing, to include conducting risk assessments and testing those provisions that create the greatest risks, on the software selected for use by its employees and volunteers.

Appendix I

Detailed Objective, Scope, and Methodology

The overall objective of the review was to determine whether the Internal Revenue Service (IRS) has an effective process to ensure tax return preparation software developers are provided with accurate tax law specifications. Specifically, we evaluated the process the IRS uses to communicate with tax return preparation software developers and transmitters during the certification process and how employees are informed of updates and changes to procedures required to prepare tax returns at the Taxpayer Assistance Centers (TAC)[1] and Volunteer Income Tax Assistance (VITA)[2] sites. To achieve this objective, we:

I. Determined if the electronic file specifications allow for the preparation of correct tax returns and permit transmission and acceptance with correct posting to the IRS Master File.[3]

   A. Developed test scenarios relating to dependency, the Child Tax Credit (CTC),[4] the Earned Income Tax Credit (EITC),[5] and filing status.

   B. Tested five tax return preparation software packages. Four of the 5 were judgmentally selected from a population of 16 software packages promoted on the IRS Internet web site, IRS.gov. The remaining software package was selected because it was used by the IRS at TACs and VITA sites. We selected the packages because they were familiar and were included in a prior Treasury Inspector General for Tax Administration (TIGTA) report dated December 2003.[6]

   C. Determined if the electronic file specifications were upgraded with the significant Tax Year (TY) 2003 tax law provisions identified in a prior TIGTA report.[7]

II. Determined the effect of systemic errors identified in the TYs 2001 and 2002 electronic file specifications.

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[1] The TACs are approximately 400 IRS offices located across the United States that exist primarily to serve taxpayers that seek face-to-face tax assistance.
[2] The VITA Program provides free Federal tax return preparation and electronic filing to certain individual taxpayers, including low-income, elderly, disabled, and limited-English proficient taxpayers.
[3] The Master File is the IRS database that stores various types of taxpayer account information. This database includes individual, business, and employee plans and exempt organizations data.
[4] The CTC is a refundable credit taxpayers may take to reduce the amount of tax up to $600 in Tax Years 2001 and 2002 for each qualifying child.
[5] The EITC is a refundable credit established to offset the impact of Social Security taxes on low-income families and encourage them to seek employment rather than welfare.
[6] *Improvements Are Needed to Ensure Tax Returns Are Correctly Prepared at Taxpayer Assistance Centers* (Reference Number 2004-40-025, dated December 2003).
[7] *Forms and Publications for Tax Year 2003 Properly Explain Specific Tax Law Changes Affecting Individual Taxpayers* (Reference Number 2004-40-069, dated March 2004).

III. Discussed with tax return preparation software developers the errors in the electronic file specifications and their processes to develop and update their tax return preparation software.

Appendix II

Major Contributors to This Report

Michael R. Phillips, Assistant Inspector General for Audit (Wage and Investment Income Programs)
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Appendix III

Report Distribution List

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    Senior Operations Advisor, Wage and Investment Division SE:W:S
    TIGTA Liaison, Chief Information Officer OS:CIO:R:PM:PO

Appendix IV

Tax Year 2003 Tax Law Changes for Individual Taxpayers

Jobs and Growth Tax Relief Reconciliation Act of 2003[1]

- Title III, Reductions in Taxes on Dividends and Capital Gains

  Sec. 301. Reduction in capital gains rates for individuals; repeal of 5-year holding period requirement.

  The 10 and 20 percent rates on the adjusted net capital gain are reduced to 5 and 15 percent, respectively, effective in taxable years ending on or after May 6, 2003, and beginning before January 1, 2009.

  For taxable years that include May 6, 2003, the lower rates apply to amounts properly taken into account for the portion of the year on or after that date. This generally has the effect of applying the lower rates to capital assets sold or exchanged (and installment payments received) on or after May 6, 2003.

  Sec. 302. Dividends of individuals taxed at capital gains rates.

  Dividends received by an individual shareholder from domestic corporations are taxed at the rates for net capital gain (5 or 15 percent per the above reduction in the capital gains rate), effective for taxable years beginning after December 31, 2002.

Trade Act of 2002[2]

- Title I, Trade Adjustment Assistance Program

  Sec. 124. Demonstration project for alternative trade adjustment assistance for older workers.

  This section requires the establishment of an alternative trade adjustment assistance program for older workers. Workers participating in the program are eligible to receive a credit for health insurance costs for a period of up to 2 years.

- Title II, Credit for Health Insurance Costs of Eligible Individuals

  Sec. 201. Credit for health insurance costs of individuals receiving a trade readjustment allowance or a benefit from the Pension Benefit Guaranty Corporation.

  This section amends Internal Revenue Code (I.R.C.) Section (§) 6429 to cover the Trade Adjustment Assistance Health Insurance Credit. It allows certain taxpayers to claim a refundable tax credit of 65 percent of their health insurance premiums. This is limited to a select number of taxpayers and became effective for premiums

[1] Pub. L. No. 108-27, 117 Stat. 752.
[2] Pub. L. No. 107-210, 116 Stat. 38.

paid in December 2002. The legislation also provides for taxpayers to receive the credit in advance.

Sec. 202. Advance payment of credit for health insurance costs of eligible individuals.

This section amends I.R.C. § 7527 to cover the Advance Payment of Trade Adjustment Assistance Health Insurance Credit.

Taxpayer Relief Act of 1997[3]

- Title II, Education Incentives

Sec. 201. Hope and lifetime learning credits.

We looked only at the lifetime learning credit. Beginning in Tax Year 2003, the amount of qualified tuition and related expenses increases from $5,000 to $10,000. The credit equals 20 percent of these qualified expenses, with the maximum credit being $2,000.

[3] Pub. L. No. 105-34, 111 Stat. 788 (codified as amended in scattered sections of 5 U.S.C., 19 U.S.C., 26 U.S.C., 29 U.S.C., 31 U.S.C., 42 U.S.C., and 46 U.S.C. app.).

Appendix V

Management's Response to the Draft Report

DEPUTY COMMISSIONER

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

RECEIVED
DEC 2 1 2004

December 21, 2004

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDIT (SMALL BUSINESS AND CORPORATE PROGRAMS)

FROM: for John M. Dalrymple
Deputy Commissioner for Operations Support

SUBJECT: Draft Audit Report – Opportunities Exist to Improve Tax Software Packages (Audit #200440028)

I have reviewed the draft audit report entitled "Opportunities Exist to Improve Tax Software Packages" (Audit #200440028). I am pleased that it acknowledges the substantial accomplishments of the Internal Revenue Service (IRS) in promoting and administering electronic filing of tax returns (*e-file*).

As the report notes, we have made significant progress attracting taxpayers to *e-file*. Taxpayers may now perform a number of functions electronically, including:

- ability to file 99 percent of all forms and schedules electronically;
- sign tax returns electronically;
- *e-file* state returns with the Federal tax return;
- pay taxes using a credit card; and
- *e-file* at no cost under certain criteria.

The number of taxpayers using *e-file* has increased from approximately 25,000 returns in 1986 to over 61.5 million in 2004.

One of our goals for electronic filing is to ensure that tax returns prepared with software are formatted correctly, computed accurately, and accepted for processing. We test all tax return preparation software used to *e-file* individual tax returns with the IRS. We intend the testing to ensure that tax preparers transmit returns in the correct format and that their software meets our electronic filing specifications.

We appreciate your acknowledgement that the IRS appropriately updated the electronic file specifications with Tax Year (TY) 2003 tax law provisions. We would like to note, however, that the reasons for the errors in the TY 2001 and 2002 file specifications that the report discusses are due substantially to late legislation, which resulted in requirements changes after we had already completed our internal testing. As the report recognizes, we quickly identified and corrected these errors and issued quick alerts to all of our software developers, advising them of the change in programming.

As your report notes, the complexity of the tax law hinders our ability, and that of tax preparation software developers, to test every scenario. We will nonetheless continue to improve the specifications we provide to software developers. By way of example, a recent statutory change that provides for a uniform definition of "child" for tax purposes may simplify development of specifications related to exemptions, the Earned Income Tax Credit, and the Child Tax Credit.

We address the report's specific recommendations in the attachment.

If you have any questions, please call me at (202) 622-6860, or have your staff call Thomas C. Mulcahy, Manager of the Program Oversight Office at (202) 283-6063.

Attachment

Attachment

Management Response to Draft Audit Report – Opportunities Exist to Improve Tax Software Packages (Audit #200440028)

RECOMMENDATION #1: The Commissioner, Wage and Investment Division, should develop procedures to ensure the electronic file specifications are reviewed for accuracy and consistency. The review should include a comparison of the file specifications used by the IRS and file specifications provided to the tax return preparation software developers to ensure the instructions are accurately interpreted and the specifications are correct and consistent.

CORRECTIVE ACTION: In order to ensure the accuracy and consistency of the electronic file specifications, the Director, Submission Processing, Wage and Investment Division (W&I), will develop a desk guide that will establish written procedures for these reviews.

In addition, the Director, Submission Processing, W&I, will work with Modernization and Information Technology Services (MITS) to document existing practices of coordinating the review of specifications, as well as to develop a cross-reference plan to compare the Functional Specification Package (FSP) to Publication 1346, Electronic Return File Specifications and Record Layouts for Individual Tax Returns, prior to submitting the publication for printing. Publication 1346 outlines the communications procedures, transmission formats, character sets, validation criteria, and reject codes for filing individual income tax returns electronically via telephone lines to participating Submission Processing Centers.

IMPLEMENTATION DATE: January 15, 2006

RESPONSIBLE OFFICIAL: Director, Submission Processing, W&I

CORRECTIVE ACTION MONITORING PLAN: The W&I Submission Processing function will use established managerial controls to monitor and ensure the corrective action is implemented.

RECOMMENDATION #2: The Chief Information Officer and the Commissioner, W&I Division, should conduct testing, in addition to the Participants Acceptability Testing (PATS) and System Acceptability Testing (SAT), on any tax return preparation software selected by the IRS before it is used by its employees and volunteers to prepare tax returns to ensure tax returns prepared by the IRS and its volunteers are accurate.

CORRECTIVE ACTION: The IRS is committed to providing its employees and its volunteer tax return preparation assistors with the training and tools to deliver quality tax return preparation assistance. We purchase off-the-shelf software products for use by employees at IRS Taxpayer Assistance Centers (TAC), IRS Employee *e-file*, IRS Volunteer Programs (Volunteer Income Tax Assistance (VITA) and Tax Counseling for the Elderly (TCE)), and the Small Business/Self-Employed (SB/SE) Disaster Relief Program. Our current contracts require that the contractor and the contractor's tax

Attachment

Management Response to Draft Audit Report – Opportunities Exist to Improve Tax Software Packages (Audit #200440028)

preparation software must be accepted by the IRS e-file program and must have a demonstrated record of successful use. The software must also have the capability to accurately process data entry applicable to current tax law, and have been previously produced, maintained, marketed, and identified as an accepted IRS e-file software package in the year prior to contract award.

It would not be feasible to perform additional testing on the tax return preparation software without impeding the availability of the software products for IRS employees and volunteers and delaying the processing of tax returns. In particular, we cannot contractually require that these commercial preparers place their products under the IRS configuration management process, where software and documentation baselines must be established and strictly controlled, because this would also require that these commercial preparers deliver to the IRS all of their programming functional specifications and design documentation.

IMPLEMENTATION DATE: Not Applicable

RESPONSIBLE OFFICIAL: Director, Product Assurance, MITS

CORRECTIVE ACTION MONITORING PLAN: Not Applicable