



*The Technical and Cost Risks of Replacing  
the Electronic Travel System Need to Be  
Resolved*

**August 24, 2006**

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This report has cleared the Treasury Inspector General for Tax Administration disclosure review process and information determined to be restricted from public release has been redacted from this document.

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TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

August 24, 2006

**MEMORANDUM FOR CHIEF, AGENCY-WIDE SHARED SERVICES**

*Michael R. Phillips*

**FROM:**

Michael R. Phillips  
Deputy Inspector General for Audit

**SUBJECT:**

Final Audit Report – The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved (Audit # 200510025)

This report presents the results of our audit to determine whether the Internal Revenue Service (IRS) should implement the new Department of the Treasury (the Treasury) e-Travel Service (eTS) or seek a waiver from the General Services Administration (GSA) from switching to the eTS. IRS officials requested the audit because they believe it is not in the best interest of the IRS to make the transition from the IRS' current electronic travel system to the Treasury's eTS.

*Synopsis*

The requirement to use an eTS was established in April 2002 with the goal of reengineering the Federal Government's travel process to realize significant cost savings and improve employee productivity. The GSA expects the 3 approved eTSs to save taxpayers up to 50 percent in Federal travel management costs over 10 years. All Federal Government agencies are expected to have moved to an approved eTS by September 2006. The Treasury selected Northrop Grumman Mission Systems' GovTrip as the eTS travel system for all of its bureaus. The GSA and the Treasury believe GovTrip will save the IRS an estimated \$29 million over 8 years. However, the IRS believes GovTrip will actually cost it about \$39 million more than its existing system over that same period.

The 10 Treasury bureaus that have implemented GovTrip have experienced technical difficulties with the system. As of May 2006, the Treasury Helpdesk for GovTrip had received approximately 1.26 requests for help for every document processed; the IRS Helpdesk for its existing electronic travel system had received just 0.10 requests for help for every document processed. This represents a difference of 1,100 percent. Some GovTrip technical issues have been unresolved for at least 9 months, and some of the temporary solutions result in an additional cost to the traveler. The IRS will gain some new features with GovTrip but will lose others. To



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recover the lost features, the IRS will need to either modify its accounting system or request customization of GovTrip at an additional cost.

We are unable to recommend the IRS implement GovTrip or seek a waiver from the requirement to use an eTS because of the weaknesses in the cost estimates of the IRS and the GSA. Cost estimates to interface GovTrip with the IRS financial system were not fully developed, and the costs to recover the features lost by converting to GovTrip were not included in the cost estimates. The cost savings were based on assumptions about the future use of online reservations but did not include risk factors to recognize the uncertainty of these predictions. In addition, the costs and savings expected in future years were not adjusted to the present value.

### *Recommendations*

We recommended the Chief, Agency-Wide Shared Services, ensure the IRS travel Helpdesk is adequately staffed to respond to the expected significant increase in the number of contacts and ensure the known technical problems are resolved, so temporary solutions do not result in additional fees to IRS travelers. We also recommended the Chief, Agency-Wide Shared Services, consider preparing a more detailed cost/benefit analysis for GovTrip implementation and, depending on the results of the analysis, consider making a second request for approval to delay implementing GovTrip. If a deferral is not granted, a more detailed analysis should provide a better estimate of the additional funds the IRS will need to implement GovTrip.

### *Response*

Management agreed with all of our recommendations and has taken steps to evaluate the travel Helpdesk staffing needs. Additionally, the IRS will contract with its financial system vendor to develop a more accurate estimate of the cost to interface and modify the financial systems with specific GovTrip requirements and will incorporate risk factors and present value calculations in any updated and more detailed cost analysis. Management's complete response to the draft report is included as Appendix V.

Please contact me at (202) 622-6510 if you have questions or Nancy Nakamura, Acting Assistant Inspector General for Audit (Headquarters Operations and Exempt Organizations Programs), at (202) 622-8500.



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## *Abbreviations*

|       |   |
|-------|---|
| AWSS  | Agency-Wide Shared Services                       |
| eTS   | e-Travel Service                                  |
| FY    | Fiscal Year                                       |
| IRS   | Internal Revenue Service                          |
| GSA   | General Services Administration                   |
| TIGTA | Treasury Inspector General for Tax Administration |
| TRAS  | Travel Reimbursement and Accounting System        |



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## *Background*

In an effort to reduce the number of individual travel systems operated and maintained throughout the Federal Government, the General Services Administration (GSA) is requiring Federal Government agencies<sup>1</sup> to start using one of three e-Travel services (eTS) by September 30, 2006. The requirement to use an eTS was established in April 2002 with the goal of reengineering the Federal Government's travel process to realize significant cost savings and improve employee productivity. The GSA expects the 3 approved eTSs to save taxpayers up to 50 percent in Federal travel management costs over 10 years. This initiative is part of the President's Management Agenda to "Expand Electronic Government."

In November 2003, three competitively bid eTS contracts were awarded to:

- Carlson Wagonlit Government Travel Inc. of San Antonio, Texas.
- Electronic Data Systems Corporation of Fairfax, Virginia.
- Northrop Grumman Mission Systems of Fairfax, Virginia.

These vendors will provide web-based travel management services for the Federal Government over 10 years. A February 2004 amendment to the Federal Travel Regulation<sup>2</sup> requires all agencies to begin implementing an eTS by the end of 2004 and to complete deployment by September 30, 2006. The Federal Government-wide e-travel system will replace agencies' existing online booking systems, and Federal Government employees will be required to use it. Under the rule, agencies will be required to allocate the budget and personnel resources necessary to support implementation of and training for their selected eTS.

While the Federal Travel Regulation requires agencies to convert to an eTS, it allows for some exceptions. The Federal Travel Regulation allows the Associate Administrator for the Office of Government-wide Policy within the GSA, or his or her designee, to grant agency waivers from the required use of the eTS or a Travel Management Service only when:

- It is in the best interest of the United States Government.
- Arranging travel services through a Travel Management Service or the eTS is impractical or imposes unreasonable burdens or costs on an agency.

The Department of the Treasury (the Treasury)—the first of 24 Federal Government agencies to select an eTS provider—has one of the largest travel voucher volumes, processing approximately 420,000 vouchers each year. The Treasury selected Northrop Grumman Mission Systems' GovTrip as its eTS and will implement GovTrip in phases.

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<sup>1</sup> The Department of Defense is excluded from this requirement.

<sup>2</sup> 41 Code of Federal Regulations, Chapters 301-304, Amendment 2003-07 (February 2004).



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GovTrip supports the entire travel process, which includes planning and authorizing travel, making reservations, delivering electronic tickets, calculating and approving reimbursements, and archiving data. GovTrip is expected to increase the number of self-service transactions, thereby reducing agency travel management costs.

Within the IRS, the Travel Services Branch in the office of Agency-Wide Shared Services (AWSS) is responsible for administering travel policies and managing the IRS' travel systems. The IRS has approximately 64,000 travelers who are reimbursed for travel-related expenses incurred while conducting official business. The IRS currently uses the Travel Reimbursement and Accounting System (TRAS) to process online travel authorizations and vouchers. The TRAS is an IRS-owned, automated, web-based program that provides travelers with a simplified way to create, edit, and view travel authorizations and vouchers. During Fiscal Year (FY) 2005, the TRAS processed 312,000 travel vouchers at a processing cost of an estimated \$1.7 million. Because the IRS owns the TRAS, there is no fee paid to outside vendors to process each voucher.

Travelers may make travel reservations and hotel accommodations by either contacting the IRS' travel agent (SatoTravel) directly or using the travel agent's online reservation system, RESX. The IRS pays a fee of \$21.50<sup>3</sup> when travelers contact the travel agent directly and \$10 per trip if travelers use RESX. There is no interface between RESX and the TRAS, so travelers must enter the information separately in each system. During FY 2005, approximately 76,000 of 96,000 reservations (79 percent) were made by contacting the travel agent directly, at a cost of about \$1.8 million.<sup>4</sup>

In March 2006, the IRS requested permission to delay the implementation of GovTrip until the IRS TRAS reached the end of its service life. However, the IRS did not estimate the remaining useful life of the TRAS. The IRS cited several reasons for requesting the delay, including the need to obtain additional funding for needed interfaces to GovTrip, time to create the interfaces, the risk associated with using GovTrip because technical issues still need to be resolved, and the burden several manual workarounds will place on IRS employees. The GSA denied the IRS' request and directed it to move forward and complete the implementation of GovTrip by May 2007.

This review was performed at the IRS National Headquarters in Washington, D.C., in the office of the AWSS during the period July 2005 through May 2006 at the request of IRS officials. 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.

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<sup>3</sup> In March 2005, the fee paid for contacting a travel agent was lowered from \$28.00.

<sup>4</sup> Because of the fee change in March 2005, the \$1.8 million is higher than it would have been if computed by multiplying all of the approximately 76,000 reservations by \$21.50.



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## *Results of Review*

### **Technical Problems With GovTrip Have Not Been Resolved**

Since the beginning of FY 2004, 10 bureaus within the Treasury have implemented GovTrip, and the Treasury has experienced a significant number of calls to the GovTrip Helpdesk for assistance. As of May 2006, 38,000 documents (authorizations and vouchers) had been processed through GovTrip. The ratio between GovTrip Helpdesk contacts and documents processed was about 1.26 contacts per document. Conversely, during FY 2005, the IRS TRAS Helpdesk responded to 31,000 calls to process 312,000 documents, for a ratio of about 0.10 contacts per document.

While it is reasonable to expect there will be a high percentage of contacts to a new system's Helpdesk during implementation of the system, the volume of Helpdesk contacts per document for GovTrip was approximately 1,100 percent higher than that for the TRAS. If the number of vouchers processed by the IRS through GovTrip is similar to that processed through the TRAS, the GovTrip Helpdesk may need the capacity to accommodate about 393,000 contacts annually. The IRS expects to staff its own Helpdesk to handle the GovTrip questions and will need to be prepared for a significant increase in the number of contacts to its travel Helpdesk, even if on a temporary basis only.

As of May 2006, the Treasury had reported 115 problems that had been formally referred to the GovTrip vendor for resolution. The issues are classified as system problem reports or system change requests. An issue is identified as a system problem if the system cannot correctly complete a required task or if the system cannot perform a specific function or task required by the Federal Travel Regulation. System change requests are issues that will make the system more user friendly or items that are specific to one agency or bureau. In May 2006, the Treasury reported that 73 of the 115 issues were classified as system problems and 42 as change requests. Of the 73 system problems, 18 have not been resolved, 8 of which have been unresolved for at least 9 months. See Appendix IV for a list of some of the problems reported as of May 2006.

The Treasury and the GovTrip vendor have developed workarounds for some of the unresolved technical issues. However, four of the temporary fixes require the traveler to contact the Travel Management Center.<sup>5</sup> Whenever a traveler contacts the Travel Management Center, a higher fee is incurred. When using GovTrip, instead of being charged \$5.25 to process the online reservation, the traveler is charged a fee of \$28.50 for contacting the Travel Management

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<sup>5</sup> A travel agency operating under GSA contract which provides transportation services to IRS and other Federal Government employees.





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Center.<sup>6</sup> The four problems with the temporary fixes that required travelers to pay the higher fee were:

- The traveler sometimes receives an error message when adjusting or amending the return airline flight.
- Travelers cannot use GovTrip to make Amtrak reservations.
- The online reservations for rental cars need to be expanded to allow for one-way car rentals.
- Some known airline flights and hotels do not show up for selection when travelers try to make reservations for foreign locations.

The IRS should ensure it will not be charged the higher fee for any service that should be available electronically. This could be done by either ensuring the technical issues are corrected or negotiating with the GovTrip vendor so travelers will not be charged a higher fee when they must contact the Travel Management Center to resolve these problems.

**The IRS will gain some new features with GovTrip but will lose others**

GovTrip offers some features that are not available on the TRAS. However, the TRAS has other features that are not offered by GovTrip. The differences in the capabilities of the two systems will require the IRS to modify its accounting system or request modification of GovTrip at an additional cost. Figure 1 compares the features of the two systems.

**Figure 1: Comparison of Travel System Features**

| Feature   | GovTrip | TRAS/RESX |
|---|---------|-----------|
| Travel Authorizations   | √       | √         |
| Online Travel Reservations                                    | √       | √         |
| Online Travel Reimbursement System                            | √       | √         |
| Reservation Data Automatically Populates Reimbursement System | √       |           |
| Electronic Receipt Management                                 | √       |           |
| Split Disbursement of Travel Funds                            | √       |           |
| Computation of Taxable Travel                                 |         | √         |
| Local Travel Authorizations                                   |         | √         |
| Multiple-Trip Vouchers  |         | √         |

*Source: Treasury Inspector General for Tax Administration (TIGTA) analysis of the two travel systems.*

**GovTrip features not available on the TRAS** GovTrip has three major features that are not available on the TRAS.

- The reservation and reimbursement functions are integrated in one system.
- Travel receipts may be electronically attached to the travel voucher.

<sup>6</sup> Reservation fee for international travel is \$35.50.



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- Travel reimbursements may be split between the traveler and the Federal Government credit card vendor.

The integration of the reservation and reimbursement functions allows for the reservation data to automatically populate the travel voucher. This eliminates the need for the traveler to input the travel information twice, which reduces the time needed to administer travel. The GSA believes this feature will also increase the percentage of travelers that make their reservations online because they will not have to reenter the travel data to the voucher system when completing their travel vouchers.

GovTrip also has the ability to electronically attach the receipts to the travel voucher. This allows the approving official to review the receipts electronically and approve the travel voucher without having to wait for the routing of the paper receipts. It also allows the entire voucher to be stored electronically in one location, which facilitates any future adjustments or audits.

In September 2005, the Office of Management and Budget required agency travel systems to have the ability to split disbursements between the traveler and the credit card company.<sup>7</sup> GovTrip allows funds reimbursed for expenses like airfare and lodging to be paid directly to the credit card company. Neither the TRAS nor the IRS financial system has the ability to split the travel disbursements. Unlike for the other two new features, the IRS must change its existing systems to allow for this capability because it is now required. However, the IRS has decided not to reprogram its financial system until a final decision is made regarding which travel system to use.

**TRAS features not available on GovTrip** If it implements GovTrip, the IRS will lose three features currently available on the TRAS.

- Computation of taxable travel.
- Local travel authorizations.
- Multiple trip vouchers.

In certain circumstances, travel expenses for official duty are considered taxable income to the employee.<sup>8</sup> When applicable, travelers at the IRS use the TRAS to report taxable travel and compute the tax due. When the GSA developed the specifications for GovTrip, requirements to compute taxable travel were not included. If the IRS converts to GovTrip, it will need to either modify its financial system to accommodate this requirement or pay the GovTrip vendor to modify GovTrip to compute taxable travel.

The IRS began to use the TRAS to authorize local travel expenses in response to a Government Accountability Office report,<sup>9</sup> which identified problems with budgeting controls. GovTrip does

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<sup>7</sup> Circular A-123, *Management's Responsibility for Internal Control*, Appendix B, Improving the Management of Government Charge Card Programs, dated August 5, 2005.

<sup>8</sup> Energy Policy Act of 1992, Pub. L. No. 102-486 (1992).

<sup>9</sup> *Financial Audit – IRS's Fiscal Years 2001 and 2000 Financial Statements* (GAO-02-414, dated February 2002).



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not offer the ability to authorize local travel. Instead, GovTrip captures the cost information when the traveler submits the voucher for expenses already incurred. The IRS would be unable to use GovTrip to identify the amount of local travel expenses employees are expecting to incur in the near future. During FY 2005, the IRS incurred about \$23.8 million in local travel costs.

The TRAS allows travelers to file one voucher associated with more than one trip. When an employee travels to different locations in consecutive weeks, he or she may file one voucher at the conclusion of the travel period. If the employee returns to his or her residence between trips, it is considered a multiple-trip voucher. GovTrip requires employees to complete a separate voucher for each trip and to incur a separate fee for each voucher. However, the number of multiple-trip vouchers has been under 16 percent of the total number of travel vouchers filed, and the IRS has implemented a new policy to cancel a travel authorization if an employee does not file a travel voucher within 30 calendar days of the expected travel completion, which may reduce this number even further.

### ***Recommendation***

**Recommendation 1:** If the IRS converts from the TRAS to GovTrip, the Chief, AWSS, should ensure the IRS travel Helpdesk is adequately staffed to respond to the expected significant increase in the number of contacts and ensure the known technical problems are resolved, so temporary solutions do not result in additional fees to IRS travelers.

**Management's Response:** The Director, AWSS Employee Support Services, agreed with our recommendation and has incorporated a benchmarking process into the IRS migration plans to ensure the IRS can evaluate Helpdesk volumes to determine timely and precise staffing needs. Based on a preliminary analysis, management believes they cannot commit to a replacement system that potentially will require a sizable staffing increase.

### ***The Cost of Implementing GovTrip Has Not Been Estimated Accurately***

In preparation for conversion to GovTrip, both the IRS and GSA (in cooperation with the Treasury) computed a cost/benefit analysis that compared the 8-year costs of GovTrip to the 8-year costs of the IRS' existing travel system (TRAS/Sato).

The cost/benefit analyses produced different conclusions as to how much each travel system would cost the IRS over the 8 years. Figure 2 compares the two 8-year costs studies.



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**Figure 2: 8-Year Costs Reported in the GSA and IRS Cost Analyses**

| <b>Cost Study</b> | <b>GovTrip Cost</b> | <b>TRAS/Sato Cost</b> | <b>Expected Savings<br/>(Additional Cost)<br/>From Implementing<br/>GovTrip</b> |
|-------------------|---------------------|-----------------------|---|
| GSA               | \$160,907,000       | \$189,523,000         | \$28,616,000  |
| IRS               | \$196,105,000       | \$156,925,000         | (\$39,180,000)  |
| <b>Difference</b> |                     |                       | <b>\$67,796,000</b>   |

Source: TIGTA analysis of the GSA and IRS cost/benefit analyses.

The GSA analysis determined that implementing GovTrip will result in about \$29 million of expected savings over the 8 years. The IRS analysis determined there would be no benefit from implementing GovTrip and it would actually cost the IRS about \$39 million more than the TRAS over the 8 years. The approximately \$68 million difference between the 2 analyses was caused by the different assumptions made for major drivers of the cost models.

We compared the GSA and IRS cost estimates to determine why the analyses reached such different conclusions. Figure 3 summarizes the differences between the two cost estimates. These differences are explained in more detail in the sections that follow.

**Figure 3: Differences Between the IRS and GSA Costs**

| <b>Category</b>         | <b>Direct Costs</b> | <b>Indirect Costs</b> | <b>Totals</b>       |
|-------------------------|---------------------|-----------------------|---------------------|
| Interface               | \$6,558,000         |                       | \$6,558,000         |
| Infrastructure Costs    | \$3,624,000         |                       | \$3,624,000         |
| Online Reservation Rate | \$5,817,000         | \$23,157,000          | \$28,974,000        |
| Local Authorizations    |                     | \$24,050,000          | \$24,050,000        |
| GSA/IRS Errors          | \$4,590,000         |                       | \$4,590,000         |
| <b>Totals</b>           | <b>\$20,589,000</b> | <b>\$47,207,000</b>   | <b>\$67,796,000</b> |

Source: TIGTA analysis of the two travel systems.

Neither analysis contained sufficient evidence to support the assumptions made for estimating all of the costs. In addition, some costs that should have been included were not present in either estimate. The IRS should include these costs when estimating the funds necessary to implement GovTrip.

**Most cost differences were related to indirect costs**

Approximately \$47 million (69 percent) of the \$68 million difference between the 2 cost estimates was related to indirect costs. Indirect costs are the costs associated with the time needed by the traveler to plan and arrange travel, the time required by the traveler’s manager to authorize the travel and approve the travel voucher, and the time spent on issuing the reimbursement and conducting any postreimbursement reviews. Theoretically, if employees



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spend less time making travel arrangements, they will have more time to devote to their regular duties, which provides the IRS with an indirect cost benefit. However, the IRS does not include indirect travel costs in its operating budget and will not realize direct monetary savings if there are reductions in these indirect costs.

**Online reservation rate (indirect costs)** The cost/benefit of implementing GovTrip is heavily dependent on the predicted future use of the online reservation system by IRS employees. The GSA conducted a study and estimated both the manual and online costs of each of the steps listed below. Figure 4 shows the difference in cost between a voucher completed manually and a voucher completed online.

**Figure 4: Indirect Time Costs Per Voucher**

| <b>Activity</b>                | <b>Manual</b>   | <b>Online</b>  |
|--------------------------------|-----------------|----------------|
| Plan and arrange travel        | \$49.29         | \$3.35         |
| Authorize and approve travel   | \$29.12         | \$14.81        |
| Post travel reimbursement time | \$58.46         | \$14.90        |
| <b>Total Costs</b>             | <b>\$136.87</b> | <b>\$33.06</b> |

*Source: The GSA.*

According to the GSA study, the time that a traveler spends planning and making travel arrangements electronically costs just \$3.35. The same trip processed manually would cost \$49.29. Therefore, the GSA concluded the IRS would save \$45.94 for every instance that required IRS employees to plan and arrange their own travel (for example, contacting hotels directly). To prepare its cost estimate, the IRS used the same cost assumptions for manual and online reservations as the GSA. The difference between the two studies was caused by a difference in the predicted number of travelers who would make reservations online.

The GSA cost analysis assumed that, when the IRS switches to GovTrip, eventually 90 percent of travelers would be making reservations using the automated reservations feature. The GSA estimate is based on the experience of other Treasury bureaus that have implemented GovTrip (76 percent usage rate) and speculates that, as travelers become more familiar with the system, usage will increase to 90 percent. The GSA assumed that, if the IRS continued using TRAS/RESX, the percentage of travelers who used RESX would be the same as it has been in the past, about 25 percent. The remaining 75 percent of travelers would make manual reservations. Figure 5 summarizes the assumptions each study used to calculate the cost of planning and making travel arrangements.



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**Figure 5: Percentage of IRS Travelers Making Online and Manual Reservations for Each Cost Study**

| Cost Study | If the IRS Implements GovTrip |                   | If the IRS Stays With TRAS/RESX |                   |
|------------|-------------------------------|-------------------|---------------------------------|-------------------|
|            | Percentage Online             | Percentage Manual | Percentage Online               | Percentage Manual |
| <b>GSA</b> | <b>90</b>                     | <b>10</b>         | <b>25</b>                       | <b>75</b>         |
| <b>IRS</b> | <b>90</b>                     | <b>10</b>         | <b>90</b>                       | <b>10</b>         |

*Source: GSA and IRS GovTrip cost/benefit analyses.*

Like the GSA analysis, the IRS cost/benefit analysis also assumed that eventually 90 percent of travelers who use GovTrip would make reservations online. However, the IRS assumed that, if it did not switch to GovTrip, the percentage of travelers who use RESX to make automated reservations in the future will increase from 25 percent to 90 percent over the 8-year life of the system. This assumption is based on the IRS' plan to issue a new travel policy requiring employees to use its current online system (RESX) to make travel reservations.

The GSA cost study concluded that the IRS would have cost savings by implementing GovTrip because 90 percent of travelers would make reservations online using GovTrip, but only 25 percent of travelers would use online reservations if the IRS kept TRAS/RESX. The IRS assumed travelers would eventually use the automated features of both systems at the same percentage. These conflicting assumptions resulted in a difference of about \$23 million for indirect costs.

**Local authorizations** The GSA and IRS disagree on the need for local authorizations. As a part of calculating the indirect cost of authorizing local travel through GovTrip, the IRS used a manual rate cost of \$29.12 per authorization because GovTrip does not include authorizations for local travel. The GSA used the online rate of \$14.81 because it believes local authorizations are not necessary. This disagreement caused about a \$24 million difference in the cost estimates.

**Some cost differences were related to direct costs**

About \$21 million (31 percent) of the \$68 million difference between the GSA and IRS cost estimates involved direct costs. Direct costs can be directly associated with the implementation and operation of the travel system. The direct costs related to GovTrip will need to be specifically considered in the IRS' annual budget.



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**Interface costs** The cost to interface GovTrip with the IRS Integrated Financial System<sup>10</sup> is unknown, and the estimates vary considerably. The GSA estimated it will cost about \$500,000 to interface the 2 systems, based on the interfaces the contractor has completed at the other agencies. However, we contacted the agencies that have selected an eTS vendor, and none of the agencies that responded had completed an interface with GovTrip. One of the agencies informed us it expected its interface costs to range from \$1.4 million to \$1.7 million. The Integrated Financial System vendor prepared a “very rough” estimate of as much as \$7 million to interface the 2 systems. The IRS Chief Financial Officer’s staff have not pursued a more firm cost estimate from the vendor or any other contractor because they do not want to incur additional costs, believing the decision to implement GovTrip will not be changed. The difference between the IRS and GSA costs for system interface was about \$6.5 million.

**Infrastructure costs** The IRS cost/benefit analysis did not include any infrastructure costs for the TRAS. The IRS owns the TRAS and is responsible for the cost of the hardware used to host it. Additionally, the IRS must bear the costs of any updates or modifications to the TRAS. Because the IRS did not identify these costs, the GSA included \$453,000 per year for TRAS maintenance costs. This estimate was based on 25 percent of the \$1.8 million annual cost of the staff devoted to maintaining the TRAS; it contributed \$3.6 million to the difference between the GSA and IRS cost estimates.

**Online reservation rate (direct costs)** Direct costs are also affected by the use of different percentages of travelers who plan and arrange travel using online reservations. Both RESX and GovTrip charge travelers a fee for making travel arrangements online. The cost of using RESX is \$10 per trip. As previously discussed, the GSA assumed that, if the IRS continued to use TRAS/RESX, only 25 percent of travelers would make reservations online. However, the IRS assumed that eventually 90 percent of travelers would make reservations online using RESX. The use of different percentages of travelers who make online reservations resulted in a difference of about \$5.8 million between the GSA and IRS cost estimates.

**GSA and IRS errors** Both the GSA and IRS analyses contained errors in the calculations of GovTrip costs in the year of implementation. The GSA cost/benefit analysis contained a \$1 million error. The first-year estimate called for 25 percent of all reservations<sup>11</sup> to be made through GovTrip, with the remaining 75 percent being made using the TRAS/RESX. However, instead of using 75 percent for the TRAS/RESX, the GSA cost computation used 75 percent for GovTrip, which caused the cost of GovTrip to be understated and the savings to be overstated by \$1 million. In addition, the IRS cost/benefit analysis contained a \$3.6 million error. The IRS estimate for GovTrip costs did not reflect that GovTrip will be used for only 25 percent of

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<sup>10</sup> The Integrated Financial System is the IRS’ core accounting system of record; when fully implemented, it is expected to provide budget preparation, general ledger, accounts payable, accounts receivable, financial reporting, and purchasing functions.

<sup>11</sup> Per the GSA estimate, both systems would be used in the first year. In subsequent years, only GovTrip would be used.



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reservations in the first year. The IRS analysis included GovTrip fees for 100 percent of vouchers and reservations and also included the cost of the TRAS. This caused the IRS' predicted cost of GovTrip to be overstated by \$3.6 million.

### **Some costs were not included or not accurately estimated in either estimate**

In addition to the costs previously discussed, we identified four additional costs associated with implementing GovTrip that were omitted from both estimates or are subject to significant change. The four costs are associated with:

- Modification of the financial system to compute taxable travel.
- Modification of the financial system to account for split disbursements.
- Increases to travel Helpdesk staff.
- Contractor costs during implementation.

Although both the GSA and IRS cost estimates included an amount to interface GovTrip with the IRS financial system, neither included an estimate to modify the software to compute taxable travel or perform split disbursements, as discussed earlier in this report. To fully comply with the appropriate laws and regulations establishing these requirements, these two modifications will need to be funded and developed or the IRS will be forced to develop some type of manual system.

The IRS Travel Services Branch may have to incur significant staff increases related to a GovTrip Helpdesk. The IRS currently staffs its own TRAS Helpdesk with approximately 15 employees. As previously discussed, GovTrip may result in a significant increase in the number of contacts to the travel Helpdesk. This would require the IRS to increase the staff of its travel Helpdesk at least temporarily. Neither the GSA nor the IRS provided an estimate of the cost to increase the number of staff assigned to the IRS travel Helpdesk.

The IRS expects to pay \$957,000 to the GovTrip vendor to implement GovTrip at the IRS; however, it has yet to negotiate what services the vendor will provide during the implementation. This is a large-scale, standard implementation package<sup>12</sup> and includes training for all user roles, dedicated implementation consulting support, and any other support services vital to the implementation. The details outlining the type and extent of contractor service will be negotiated and could affect the total price. If the IRS performs some of the actions required during implementation, the costs could be less. Conversely, if the IRS has needs greater than those offered by the vendor in its implementation package, the IRS could incur additional expenses. For example, if the IRS needs more training than that offered in the standard vendor

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<sup>12</sup> The contract provides for implementation packages that are priced based on agency size. The smallest package, Level A, is for purchasers with 500 or fewer GovTrip users and costs \$125,253. The IRS is purchasing Level D, at \$957,000, for purchasers with up to 120,000 users.





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## *The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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package, it would have to conduct the training itself or contract with the vendor for additional training at additional cost.

We are unable to recommend the IRS implement GovTrip or seek a waiver from the requirement to use an eTS because of the weaknesses in the cost estimates of the IRS and the GSA. An accurate estimate of system costs is necessary to produce a valid cost/benefit analysis. Typically, over its useful life, a system must provide cost savings that at least offset the one-time costs of implementation. When costs and/or benefits are unknown or uncertain, the cost/benefit analysis should include risk factors that adjust the costs and savings to reflect the degree of risk associated with specific tasks. Additionally, long-term projects should include the appropriate present value discount calculations. Office of Management and Budget Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*,<sup>13</sup> provides instructions for agencies to follow when assigning risks and present value factors. Neither the GSA nor the IRS analysis included such factors.<sup>14</sup>

If a reliable cost/benefit analysis demonstrates that implementing GovTrip will put the IRS at a significant cost disadvantage as compared to continuing use of the TRAS, we believe the IRS will have credible evidence for requesting another deferral from implementing the eTS, as allowed under the Federal Travel Regulation. If such a request is made, the IRS should include an estimated date(s) for retiring the TRAS. A more accurate cost/benefit analysis will also provide the IRS with a better estimate of the costs to implement GovTrip and use either system, which should improve its overall budgeting for future travel costs.

### ***Recommendation***

***Recommendation 2:*** The Chief, AWSS, should consider preparing a revised cost/benefit analysis with more detailed cost information for GovTrip implementation, including system interface costs, modifications to the financial system, and the specific requirements of the GovTrip contractor. The cost/benefit analysis should address risk factors for the uncertain variables, including the travel Helpdesk calls and the percentage of travelers who make online travel reservations, and include appropriate discounting for the present value. Depending on the results of the analysis, the Chief, AWSS, might consider making a second request for approval to delay implementing GovTrip. If a deferral is not requested or not granted, a more detailed analysis should provide a better estimate of the additional funds the IRS will need to implement GovTrip.

***Management's Response:*** The Director, AWSS Employee Support Services, agreed with our recommendation and plans to contract with the financial system vendor to develop a more accurate estimate of the cost to interface and modify the financial systems

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<sup>13</sup> Dated October 1992.

<sup>14</sup> If discount factors (5 percent) had been used, the expected benefits of both estimates would have been reduced by about 20 percent.



*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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with specific GovTrip requirements. A more detailed analysis will include the appropriate risk factors and present value discounting. Alternate plans, including another request to delay implementation, are being developed in the event that the revised analysis does not support implementation of GovTrip.



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*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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## Appendix I

### *Detailed Objective, Scope, and Methodology*

The overall objective of this review was to determine whether the IRS should implement the new Department of the Treasury (the Treasury) eTS<sup>1</sup> or seek a waiver from the GSA from switching to the eTS. To accomplish this objective, we:

- I. Obtained and analyzed the IRS cost/benefit data analysis for converting to the eTS.
  - A. Verified the assumptions the IRS made in developing its cost figures for the cost of the TRAS<sup>2</sup> and the migration to GovTrip.
  - B. Verified the IRS' projected costs to interface GovTrip with the IRS Integrated Financial System.<sup>3</sup>
  - C. Determined the future costs of the TRAS.
  - D. Attempted to determine the capacity of the TRAS.
  - E. Obtained a copy of the contract and task order to determine if the costs/fees of using GovTrip are guaranteed in the contract or if the contractor can adjust them based on future volumes.
- II. Obtained and analyzed the cost/benefit data analysis performed by the GSA and Treasury for converting the IRS from the TRAS to GovTrip.
  - A. Determined if the GSA agrees with the IRS migration cost figures and investigated those in question.
  - B. Identified the volume of travelers at the other Treasury bureaus.
- III. Benchmarked the IRS' possible conversion to GovTrip with other Federal Government agencies by obtaining and reviewing the costs, benefits, and implementation schedules of those that have successfully implemented any of the three eTSs.<sup>4</sup>

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<sup>1</sup> The Treasury selected Northrop Grumman Mission Systems' GovTrip as the travel system for all of its bureaus.

<sup>2</sup> The IRS currently uses the TRAS to process online travel authorizations and vouchers. The TRAS is an IRS-owned, automated, web-based program that provides travelers with a simplified way to create, edit, and view travel authorizations and vouchers.

<sup>3</sup> The Integrated Financial System is the IRS' core accounting system of record; when fully implemented, it is expected to provide budget preparation, general ledger, accounts payable, accounts receivable, financial reporting, and purchasing functions.

<sup>4</sup> In November 2003, three competitively bid eTS contracts were awarded.



*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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- A. Obtained from the GSA all cost data related to other Federal Government agencies that have already converted to an eTS and compared them with the cost figures put forth by the IRS.
- B. Obtained from the GSA any proposed cost figures for the other bureaus in the Treasury.



*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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**Appendix II**

*Major Contributors to This Report*

Daniel R. Devlin, Assistant Inspector General for Audit (Headquarters Operations and Exempt Organizations Programs)

Nancy A. Nakamura, Acting Assistant Inspector General for Audit (Headquarters Operations and Exempt Organizations Programs)

Michael E. McKenney, Director

Carl L. Aley, Acting Director

Kevin Riley, Audit Manager

David Robben, Lead Auditor

Charles Ekunwe, Senior Auditor

Michael Della Ripa, Auditor



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**Appendix III**

*Report Distribution List*

Commissioner C  
Office of the Commissioner – Attn: Chief of Staff C  
Deputy Commissioner for Operations Support OS  
Chief Financial Officer OS:CFO  
Chief Information Officer OS:CIO  
Chief Counsel CC  
National Taxpayer Advocate TA  
Director, Office of Legislative Affairs CL:LA  
Director, Office of Program Evaluation and Risk Analysis RAS:O  
Office of Internal Control OS:CFO:CPIC:IC  
Audit Liaisons:  
    Chief, Agency-Wide Shared Services OS:A  
    Chief Financial Officer OS:CFO  
    Chief Information Officer OS:CIO



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**Appendix IV**

*Reported GovTrip<sup>1</sup> Problems*

| <b>Top 10 Problems</b> |   | <b>SPR<sup>2</sup></b> | <b>SCR<sup>3</sup></b> |
|------------------------|---|------------------------|------------------------|
| 1                      | Some capacity-limited airline flights are returned with a price of \$0.   | XX                     |                        |
| 2                      | Comparative cost vouchers do not work properly.   | XX                     |                        |
| 3                      | Approving officials would like the ability to turn off automatic emails.  | XX                     |                        |
| 4                      | GovTrip does not compute long-term taxable travel. <sup>4</sup>   |                        | XX                     |
| 5                      | There is a lack of data associated with the reservation fee charged to the traveler's credit card, which makes it difficult to reconcile the charges. | XX                     |                        |
| 6                      | Employees would like to view their travel information without having to prepare a document.   |                        | XX                     |
| 7                      | Northrop Grumman's web-based training needs to be updated and improved.   | XX                     |                        |
| 8                      | The audit descriptions need to be in an administrative table and not hard coded, so they can be more explicit and customized.                         |                        | XX                     |
| 9                      | GovTrip does not allow a traveler to choose to route travel documents to either his or her primary or secondary approver.                             |                        | XX                     |
| 10                     | GovTrip does not include a drop-down project code field on the accounting code page for reporting purposes.   |                        | XX                     |

*Source: Department of the Treasury May 2006 GovTrip Status Report.*

<sup>1</sup> The Department of the Treasury selected Northrop Grumman Mission Systems' GovTrip as the travel system for all of its bureaus.

<sup>2</sup> System Problem Report. An issue is identified as a system problem if the system cannot correctly complete a required task or if the system cannot perform a specific function or task required by Federal Government regulations.

<sup>3</sup> System Change Request. System change requests are issues that will make the system more user friendly or items that are specific to one agency or bureau.

<sup>4</sup> In certain circumstances, travel expenses for official duty are considered taxable income to the employee.



*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

| <b>Issues Open for 9 or More Months</b> |   | <b>SPR</b> | <b>SCR</b> | <b>Top 10</b> |
|---|---|------------|------------|---------------|
| 1                                       | Approving officials would like the ability to turn off automatic emails.  | X          |            | Y             |
| 2                                       | Sometimes the user will receive an error message when adjusting or amending the return airline flight.                            | X          |            | N             |
| 3                                       | Some known airline flights and hotels do not show up for selection when travelers try to make reservations for foreign locations. | X          |            | N             |
| 4                                       | Users have problems locating hotels when they search by cities that begin with abbreviations (e.g., St., Ft., and Mt.).           | X          |            | N             |
| 5                                       | Approving officials have problems when trying to review the details of a selection and then return to the previous screen.        | X          |            | N             |
| 6                                       | The "Continue" button at the bottom of the screen should take the user to the next logical screen instead of the preview screen.  | X          |            | N             |
| 7                                       | Comparative cost vouchers do not work properly.   | X          |            | Y             |
| 8                                       | When "Passenger" is the only expense selected, it does not appear to save correctly.  | X          |            | N             |

*Source: Department of the Treasury May 2006 GovTrip Status Report.*





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**Appendix V**

*Management's Response to the Draft Report*

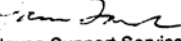


DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, D. C. 20224

RECEIVED  
JUL 17 2006

July 17, 2006

MEMORANDUM FOR MICHAEL R. PHILLIPS  
DEPUTY INSPECTOR GENERAL FOR AUDIT

FROM: Janis Landis   
Director, Employee Support Services

SUBJECT: Draft Audit Report – The Technical and Cost Risks of Replacing the Electronic Travel System Need to be Resolved (Audit #200510025)

I have reviewed the subject report and agree with its content. Attached are our responses to the two recommendations which we are closing based on a benchmarking process to project additional workload GovTrip would generate, and the development of processes to more accurately assess costs and impacts of e-Travel systems.

We commend the audit team for their analysis and confirmation of our concerns that significant program issues must be resolved before e-Travel can be implemented.

If the revised cost/benefit analysis of our current TRAS system and GovTrip confirms preliminary data, it is questionable whether IRS will be able to support the implementation of GovTrip.

Our primary concern is the additional costs that implementation of GovTrip will have on several subcomponents:

- the initial interface with our finance system, which will have to be developed, will cost approximately \$7,000,000;
- annual operating costs, given the fees that will need to be paid to the contractor, will total about \$3,000,000 over our current cost;
- GovTrip will require a ten-fold increase to our Travel Services staff (adding approximately 150 non-compliance positions) to support the staggering increase in volume of Help Desk contacts which other GovTrip participants have experienced. This result is particularly onerous in light of the fact that IRS is reducing staffing levels in non-compliance areas to support the Commissioner's and Congress's mandate that IRS move FTEs to compliance/enforcement functions.



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*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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The second major area of concern is functionality:

- Northrop Grumman (NG) system, the e-travel system selected by the Department of Treasury, does not comply with the tax code requirements for long-term taxable travel. While NG indicates that they will develop this functionality, they will only do so if IRS pays the cost.
- NG system currently has about 45 workarounds for facets of the system that are not functioning properly. For an Agency such as ours with 64,000 travelers, this is not feasible.
- NG system does not permit local travel authorizations, which we have instituted in accordance with GAO requirements

By contrast, our current TRAS system requires no additional expenditure on our part and meets all e-Travel requirements with one exception. That exception is split disbursements which we can implement for a one-time cost of \$500,000; however, until the issue of IRS participation in GovTrip is resolved, IRS is not authorized to expend monies to enhance TRAS.

If you have any questions, please contact me on (212) 298-2352 or a member of your staff can contact Frank Soto, Associate Director, Travel Services on (909) 388-8254. For matters concerning audit follow-up, please call Greg Rehak on (202) 622-3702.

Attachment



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*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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**Attachment**

**RECOMMENDATION 1:** If the IRS converts from the TRAS to GovTrip, the Chief, AWSS should ensure the IRS travel Helpdesk is adequately staffed to respond to the expected significant increase in the number of contacts and the known technical problems are resolved, so temporary solutions do not result in additional fees to IRS travelers

**CORRECTIVE ACTION:** A benchmarking process has been incorporated into the migration plan for e-Travel. The benchmarking includes an accurate evaluation of travelers and assistance telephone calls so that a timely and precise staffing pattern can be established to support the projected assistance calls.

Preliminary analysis indicates that to provide the current level of Helpdesk service when coupled with the increased volume expected under GovTrip, we would need to increase Helpdesk staffing from our current level of 16 travel services specialists to 166 travel specialists. In light of our preliminary analysis, we are unable to commit to a replacement system requiring this magnitude of staffing increase.

**COMPLETION DATE:** July 10, 2006

**RESPONSIBLE OFFICIAL:** Director, AWSS Employee Support Services



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*The Technical and Cost Risks of Replacing the Electronic Travel System Need to Be Resolved*

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**Attachment**

**RECOMMENDATION 2:** The Chief, AWSS should consider preparing a revised cost/benefit analysis with more detailed cost information for GovTrip implementation, including system interface costs, modifications to the financial system, and the specific requirements of the GovTrip contractor. The cost/benefit analysis should address risk factors for the uncertain variables, including the travel Helpdesk calls and the percentage of travelers who make on-line travel reservations, and include appropriate discounting for the present value. Depending on the results of the analysis, the Chief, AWSS might consider making a second request for approval to delay implementing GovTrip. If a deferral is not requested or not granted, a more detailed analysis should provide a better estimate of the additional funds the IRS will need to implement GovTrip.

**CORRECTIVE ACTION:** Critical steps have been taken to implement the recommended revisions to the cost/benefit analysis. In FY2007, we will contract with our financial system vendor to work with us and Northrop Grumman to provide a more accurate and detailed analysis of the costs of interfacing and modifying our financial systems with specific GovTrip requirements, such as split disbursements. Methodology used will include an assessment of risk factors and discounting for the present value.

In addition, the Director, AWSS Employee Support Services, in concert with the CFO, is ready to implement a Servicewide policy mandating the use of the RESX system, which will significantly minimize one of the benefits of GovTrip and produce a monetary savings for the IRS, estimated at \$600K with 50% RESX usage.

Alternate plans of action which include submission of a request to delay implementation of GovTrip have been developed in the event that the results of the more detailed analysis and comparisons do not support implementation of GovTrip.

**COMPLETION DATE:** July 10, 2006

**RESPONSIBLE OFFICIAL:** Director, AWSS Employee Support Services