



Highlights of GAO-06-795, a report to Congressional Committees

July 2006

## TRANSPORTATION SECURITY ADMINISTRATION

### Oversight of Explosive Detection Systems Maintenance Contracts Can Be Strengthened

#### Why GAO Did This Study

Mandated to screen all checked baggage by using explosive detection systems at airports by December 31, 2003, the Transportation Security Administration (TSA) has deployed two types of screening equipment: explosive detection systems (EDS), which use computer-aided tomography X-rays to recognize explosives, and explosive trace detection (ETD) systems, which use chemical analysis to detect explosive residues. This report discusses (1) EDS and ETD maintenance costs, (2) factors that played a role in these costs, and (3) the extent to which TSA conducts oversight of maintenance contracts. GAO reviewed TSA's contract files and processes for reviewing contractor cost and performance data.

#### What GAO Recommends

GAO recommends that the Secretary of Homeland Security direct TSA to (1) establish a timeline to close out the contract with Boeing Service Company (Boeing) and report to congressional committees on actions to recover any excessive fees awarded to Boeing, (2) establish a timeline to complete the EDS life-cycle model, and (3) revise policies to require documentation for monitoring EDS and ETD maintenance contracts. The Department of Homeland Security concurred with GAO's recommendations and described actions TSA had taken or planned to take to implement them.

[www.gao.gov/cgi-bin/getrpt?GAO-06-795](http://www.gao.gov/cgi-bin/getrpt?GAO-06-795).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Cathleen A. Berrick at (202) 512-8777 or [berrickc@gao.gov](mailto:berrickc@gao.gov).

#### What GAO Found

TSA obligated almost \$470 million from fiscal years 2002 through 2005 for EDS and ETD maintenance, according to TSA budget documents. In fiscal year 2006, TSA estimates it will spend \$199 million and has projected it will spend \$234 million in fiscal year 2007. TSA was not able to provide GAO with data on the maintenance cost per machine before fiscal year 2005 because, according to TSA officials, its previous contract with Boeing to install and maintain EDS and ETD machines was not structured to capture these data.

Several factors have played a role in EDS and ETD maintenance costs. According to a September 2004 Department of Homeland Security's Office of Inspector General report, TSA did not follow sound contracting practices in administering the contract with Boeing, and TSA paid provisional award fees totaling \$44 million through December 2003 without any evaluation of Boeing's performance. TSA agreed to recover any excessive award fees paid to Boeing if TSA determined that such fees were not warranted. In responding to our draft report, DHS told us that TSA and Boeing had reached an agreement in principle on this matter and that documentation was in the approval process with closure anticipated in July 2006. Moreover, TSA did not develop life-cycle cost models before any of the maintenance contracts were executed and, as a result, TSA does not have a sound estimate of maintenance costs for all the years the machines are expected to be in operation. DHS also stated in its comments on our draft report that a TSA contractor expected to complete a prototype life-cycle cost model by September 2006 and that TSA anticipated that the EDS model would be completed 12 months after the prototype was approved. Without such an analysis, TSA may not be identifying cost efficiencies and making informed procurement decisions on future purchases of EDS and ETD machines and maintenance contracts. TSA has taken actions to control costs, such as entering into firm-fixed-price contracts for maintenance starting in March 2005, which have advantages to the government because price certainty is guaranteed. Further, TSA incorporated standard performance requirements in the contracts including metrics related to machine reliability and monthly performance reviews. For EDS contractors, TSA has specified that the full agreed price would be paid only if mean downtime (i.e., the number of hours a machine is out of service in a month divided by the number of times that machine is out of service per month) requirements are met.

Although TSA has policies for monitoring contracts, TSA officials provided no evidence that they are reviewing required contractor-submitted performance data, such as mean downtime data. TSA officials told GAO that they perform such reviews, but do not document their activities because there are no TSA policies and procedures requiring them to do so. As a result, without adequate documentation, TSA does not have reasonable assurance that contractors are performing as required and that full payment is justified based on meeting mean downtime requirements.