



Transportation Security Administration

Synopsis

BAGGAGE SCREENING INVESTMENT STUDY

The Baggage Screening Investment Study (BSIS) defines an investment strategy for the Transportation Security Administration's (TSA's) Electronic Baggage Screening Program (EBSP), which will accelerate the deployment of Explosives Detection System (EDS) equipment and more automated checked baggage screening systems at U.S. airports, thereby improving security and lowering life-cycle costs. Many of the current deployments rely on stand-alone EDS and Explosives Trace Detection (ETD) equipment for primary screening of baggage, perpetuating suboptimal screening systems and resulting in elevated life-cycle costs and increased processing times. Also, many of these systems are not easily scalable to match traffic growth, and without adequate capital investment, screener staffing levels would have to increase significantly to maintain 100% electronic screening compliance. Additionally, without *expedited* capital investment, the life-cycle replacement requirements for the initially deployed screening systems will impede investment in new optimal systems, slowing deployment of EDS equipment to additional airports and increasing costs.

As checked baggage screening is a federal responsibility under the Aviation and Transportation Security Act of 2001 (ATSA) (Public Law 107-71), the airline and airport members of the Aviation Security Advisory Committee (ASAC) BSIS Working Group felt that the federal government should be responsible for 100 percent of the funding necessary to achieve this mandate, including replacing or upgrading the many current suboptimal initially deployed systems. However, no explicit agreement was reached on a specific cost-sharing formula given differences of view about the degree of federal responsibility under ATSA for funding optimal screening solutions and the realities constraining the federal budget.

Instead, the BSIS Working Group reviewed many potential funding and financing options and agreed to support the following investment strategy and recommend the associated necessary legislative actions:

- Create a voluntary \$3 billion tax credit bond (TCB) program under which airports could issue tax credit bonds—on their own behalf or on behalf of airlines that operate terminals—to help fund the necessary infrastructure to accommodate optimal EDS baggage screening systems. With this program, the effective share of facility modification costs borne by airports and airlines would be about 25 percent.
- Continue federal appropriations of at least \$435 million for purchase and installation of EDS, escalating annually. These appropriations are necessary not only for purchase and installation of screening equipment, but also for issuance of



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- facility modification grants to airports and airlines that do not participate in the TCB program.
- Appropriate purchase and installation funds as a combined line item to provide TSA with increased flexibility in light of the voluntary nature of the TCB program
 - Enhance Passenger Facility Charge (PFC) program flexibility to include
 - (a) TCB sinking fund payments and
 - (b) modification or construction of exclusive-use outbound baggage handling systems and infrastructure to accommodate EDS screening systems.

Under this recommended approach, the 20-year present value cost of the EBSP is estimated to be \$23.3 billion between 2006 and 2025. Of these costs, the aviation industry is projected to bear \$3.6 billion and the federal government is projected to bear \$19.7 billion. While the industry is projected to bear new and substantial costs for the installation, operation, and maintenance of more complex baggage handling systems and associated facilities necessary to support optimal EDS baggage screening, the net effect of increased investment in optimal systems would be to reduce overall life-cycle costs by \$1.2 billion relative to the current rate of investment, primarily through screener staff cost savings and avoidance of increased screener staff costs in the future.

To achieve these cost savings, it is critical that a more active, collaborative, and formal cost management process be established. Cost management is essential given rapidly evolving technology and design practices, multi-party involvement in design and operation, and the amount of capital investment to be made over the next several years. Key TSA actions required are:

- Publish BSIS Planning and Design Guidelines* for baggage screening systems, with an emphasis on performance standards, embracing new technology, and economic analysis to determine optimal solutions. Implement a structured process for ongoing government/industry collaboration.
- Increase program management resources to provide for more substantial TSA involvement throughout the planning, design, and construction process.
- Issue detailed funding guidance to the aviation industry explaining the alternatives available for funding baggage screening systems and communicate the process and business rules to access facility modification grants for airports and airlines not wishing or not able to use the TCB program. Any guidance on the use of PFCs would be developed jointly with the Federal Aviation Administration.

* The Recommended Security Guidelines for Airport Planning, Design and Construction (revised June 15, 2006) issued by TSA and developed with the assistance of a different working group formed under ASAC addressed near-term recommendations for best practices with regard to security planning across a number of different functional components of airports. The section on checked baggage screening describes a number of lessons learned, but focuses on the implementation of systems with currently certified



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technologies. The BSIS Working Group Technical Team is currently developing new guidelines focusing specifically on checked baggage screening that reflect the results and goals of the BSIS, which include the deployment of new screening technology, the requirement for life-cycle cost estimates to determine the optimal screening solution, and an enhanced planning and design process reflecting a more cost-effective and participatory approach.