Checked Baggage Technology Update

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Agenda

• EBSP Overview
• EBSP Key Priorities
• Recapitalization and Optimization
• PGDS Updates
• EDS-CP
• Key Initiatives Update
• Way Forward
Electronic Baggage Screening Program

Overview

EBSP is a mixed lifecycle acquisition program that identifies, tests, procures, deploys, and sustains equipment that detects concealed explosives in checked baggage. EBSP utilizes both Explosives Detection Systems (EDS) and Explosives Trace Detection (ETD) technologies for checked baggage screening.
The Electronic Baggage Screening Program (EBSP) is currently focused on a number of key priorities that will enable the program to flex with TSA’s mission and improve TSA’s ability to rapidly respond to emerging threats.

### Recapitalization & Optimization
- Successful execution of recapitalization and optimization relies on visibility to, input from, and coordination with airports and Industry.
- Technical obsolescence, which is the inability to reach the next level of detection, will be a main driver for ranking future projects.

### EDS Competitive Procurement
- EBSP’s rolling Qualified Products List (QPL) acquisition strategy provides an open opportunity for vendors to qualify EDS.
- TSA deployed its first EDS-CP unit in June 2013.
- TSA anticipates the award of Medium Speed EDS contracts before the end of FY14, and High Speed EDS contract(s) before the end of FY15.

### Detection Upgrades
- TSA will complete EDS upgrades to the 2010 Detection Standard before the end of FY14.
- Original Equipment Manufacturers (OEMs) are working with TSA to develop algorithms for legacy and new EDS that meet the 2012 Detection Standard.

### Technology Initiatives
- EBSP is in the process of developing a Risk-Based Security (RBS) strategy that aligns with the Agency’s priorities for risk based screening and leverages successes in Checkpoint
- Implementation of a Rapid Algorithm Development effort that can help the Agency rapidly respond to emerging threats.
Recapitalization and Optimization

**FY14 Projects and Future Project Selection**

In FY13, EBSP successfully obligated **30 Design OTAs** and **30 Facility Modification OTAs** across **38 airports**; significantly fewer OTAs are anticipated in FY14 due to funding needs to complete current projects.

### FY14 Projects

- Approximately $78M has been budgeted for OTAs in FY14. This figure is subject to change based on cost validations and Office of Acquisition negotiations.
- EBSP planned to pursue two OTAs in 2014, with one OTA obligated to OGG in 13-Dec, and DEN outstanding.
  - While some airports were awarded Design OTAs in FY13, TSA will only pursue Facility Modification OTAs with those airports in FY14 if funding is available.
  - Airports will be notified accordingly.

### Future Projects

- Funding for optimization efforts is only considered after cost effectiveness analysis is completed to determine if TSA should invest in the project and what level of funding TSA could contribute, if funds are available.
  - If the results of the analysis are unsatisfactory, TSA will continue to support 100% of the costs of the recapitalization project, as previously agreed upon.
- A Return on Investment (ROI) approach will be utilized in collaboration with airports to determine the cost effectiveness of optimization projects.
  - A positive ROI must be realized within 10 years to proceed with an optimization project without additional funding required from the airport.
  - Should an airport choose to pursue optimization instead of recapitalization, airports are responsible for covering all costs beyond the maximum amount TSA can pay.

**Operational deficiency will be the driver for future recapitalization and optimization projects.**
Recapitalization and Optimization

Airport and Industry Engagement

The majority of the initial recapitalization planning process is handled by TSA, however airports and Industry may be asked to participate in site evaluation, cost-effectiveness analysis for optimization, and/or funding of airport projects.

Site Evaluation

While TSA collects data and prioritizes units for recapitalization, airports will be asked to participate in planning efforts, if necessary, and to facilitate a site visit for TSA-OSC and contractor personnel.

100% Funding

- TSA will pay for 100% of the allocable cost associated with recapitalization of equipment.
- No cost share will be required from airports for recapitalization projects.

Cost Share

- Optimization efforts approved by TSA will include necessary cost share between TSA and the airport for allocable costs and the recapitalization cost.
- Large and medium hub airports will be responsible for a 10% cost share of allowable costs, up to the not-to-exceed dollar value of each project.
- Small/non-hub airports will be responsible for a 5% cost share of allowable costs, up to the not-to-exceed dollar value of each project.
The Planning Guidelines and Design Standards version 4.2 was published on May 5th, 2014; some comments were addressed in the most recent version, with a more significant overhaul anticipated for Version 5.0, estimated for late CY2014 release.

**PUBLISHED PGDS v4.2**
- Public comments on Version 4.1 received from 9/15/2011 through 6/1/2012 and internal TSA stakeholders also provided inputs:
  - OSC Engineering generated 159 response documents addressing all industry changes and comments
- Stakeholders determined that a comprehensive evaluation of the PGDS is necessary prior to developing Version 5.0
- Intermediate Version 4.2 addressing near-term needs was published on 5/5/2014
  - Incorporates all industry comments that were accepted by TSA
  - New content added by TSA was reviewed by Industry prior to publication
- Appendix F was removed and published as a separate policy document addressing Checked Baggage Inspection System (CBIS) funding

**DEVELOPING PGDS v5.0**
- New forum established for collaboration between TSA and Industry on all future PGDS rewrites, starting with the significant update to PGDS Version 5.0
  - A PGDS Working Group comprised of Industry representatives and stakeholders has been formed and is meeting quarterly
  - A Technical Review Committee comprised of TSA stakeholders is currently being implemented to facilitate the update and management of the PGDS in coordination with industry partners
- Estimated release of PGDS Version 5.0 is the end of CY14
EDS Competitive Procurement (EDS-CP)
Rolling QPL and Detection Standard Updates

Vendors seeking entry to the Qualified Products List (QPL) should take note of the following recent changes:

EDS-CP Rolling QPL Changes
- Certification Readiness Testing (CRT) has been removed from the EDS certification process, which should save both TSA and vendors time and resources.
- Upon successful completion of required testing milestones, EDS will be placed on the QPL.
  - Previously, vendors were provided windows of opportunity within a specified timeframe to submit their certified systems for qualification.
  - These windows no longer exist, and an EDS may enter the certification and qualification process at any time.

Detection Upgrades
- In June 2014, TSA announced that as of January 1, 2015, all EDS must meet the 7.2 detection standard to enter testing.
- All EDS will be upgraded to the 2010 Detection Standard before the end of FY14.
  - The next round of EDS procurements and upgrades will be to the 2012 Detection Standard.
  - Deployment of these upgrades are expected to begin in late FY14.

Any EDS that is currently in the testing process (including Certification) can continue through the testing process; any EDS that has not yet entered Certification by January 1, 2015 must be compliant with the 7.2 detection standard.
EBSP is currently supporting two key technical initiatives that will improve TSA's overall security posture and ability to respond to emerging threats:

**Risk Based Security (RBS)**

In May 2014, TSA released its Transportation Security Strategic Capability Investment Plan, which offered a high-level overview of the Program’s potential implementation of RBS for baggage screening. Key potential capabilities include:

- Enabling technology connected to Secure Flight that provides both credential authentication and retrieval of the passenger’s risk assessment in near-real time;

- Networking of capabilities through the Security Technology Integrated Program (STIP);

- Optimization of existing solutions through the development of component technologies to “read” risk of bags in the BHS; and

- Enhancements to EDS that enable rapid adjustment of the security posture.

**Rapid Algorithm Development (RAD)**

EBSP is working closely with EDS vendors to implement a rapid algorithm development model, with vendors anticipated to develop and deliver a new algorithm within 10 weeks with a goal of <10% false alarm rates. Key objectives include:

- Establishing a model for rapid algorithm development that can be utilized for other technologies;

- Improving TSA’s ability to rapidly respond to emerging or immediate threats with new detection capabilities

- Reducing existing development timeline and establishing a testing model that supports accelerated capability delivery

Both RBS and RAD will enable security agility for checked baggage screening and lay the foundation for future capability development.
Way Forward
What’s Next for EBSP?

RECAPITALIZATION & OPTIMIZATION

- Efficient execution and close collaboration with airports, airlines, and the security industry is critical to the success of recapitalization and optimization projects.
- EBSP will continue working with airports that received both their Design and Facility Modification OTAs in FY13 to bring those projects to completion.
- Future recapitalization projects will be ranked on new criteria related to technical obsolescence. These projects will be initiated as funding is available.

DETECTION UPGRADES

- Original Equipment Manufacturers (OEMs) are working with TSA to develop algorithms for legacy and new EDS that meet enhanced detection standards.
- All EDS must meet the 7.2 detection standard by January 1, 2015 to begin testing; EDS that cannot meet this standard cannot enter the certification process after January 1.

DETECTION UPGRADES

- TSA anticipates the award of MSEDS contracts before the end of FY14 and HSEDS contracts before the end of FY15.