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The Innovation Task Force

Founded in 2016, ITF was initiated and championed by TSA out of a need heard from industry to better understand the operational environment earlier in the development cycle and from TSA to better define requirements to close capability gaps in partnership with stakeholders.

Our Mission

Foster innovation by integrating key stakeholders to identify and demonstrate emerging solutions that increase security effectiveness and efficiency, improve passenger experience and the flow of commerce, and deliver solutions that secure the freedom of movement throughout the nation’s transportation system.

Collaborate
Convene the aviation security ecosystem to identify and demonstrate solutions

Demonstrate
Establish the capability for TSA to quickly demonstrate innovative solutions

Assess
Measure solution effectiveness to achieve the optimized future state and provide vendors with data to improve solutions
About ITF

ITF Responsibilities

To demonstrate emerging capabilities across the transportation security ecosystem in partnership with stakeholders and support TSA’s broader goal to advance, innovate, and adapt.

To diversify the industrial base and provide industry increased access to operational data, which allows vendors to mature solutions that will meet TSA needs.

To solicit mature people, process, and technology solutions to be rigorously evaluated and demonstrated in a live operational environment, advancing security and driving requirements.

ITF positions TSA to better inform upgrades to current solutions and future capabilities, enhancements to processes and training delivery, long-term investment strategy, and future requirements and acquisitions with a system-of-systems approach.
Identifying Solutions

**ITF Solicitations…**
- Allow ITF to work with transportation security stakeholders to identify solutions for demonstrations that meet TSA’s needs.
- Enable selections based on potential solution benefit to TSA and feasibility of the proposed demonstration.
- Have been executed through ITF-Led BAAs (3), RFI (1), and RFQ (1), in addition to other ITF solicitation support.

**IDEA Broad Agency Announcement (BAA) Submission Goals**
- Align to the TSA Mission
- Address TSA Capability Gaps
- Improve Security Effectiveness
- Improve Screening Efficiency
- Enhance the Passenger Experience

**IDEA BAA Process**
- Release BAA
- White Paper Review
- Request Capability Proposals (CDPs)
- CDP Review & Selection
- Demonstrate
Previous ITF Demonstrations

ITF-Led solution demonstrations allow vendors to pilot their solutions in the field, capture operational data, and refine their solution for potential future engagement with TSA.

Computed Tomography (CT)
- Analogic, IDSS, L3, Smiths Detection

Passenger Communications
- Synect

Training Simulator
- ProDetect

Explosive Trace Detection
- Rigaku

Automated Screening Lanes (ASL)
- MacDonald Humfrey, Scarabee, Vanderlande

Identity Verification
- Idemia

Planning & Staff Allocation
- Copenhagen Optimization
Upcoming ITF Demonstrations

ITF’s upcoming solution demonstrations were sourced from the division’s third annual Broad Agency Announcement (BAA).
Continuous Process Improvement

Continuous Process Improvement (CPI), enabled by Lean Six Sigma (LSS), provides process improvement, innovation, analysis, and training to promote problem solving, TSA member resources, and flexible infrastructure aligned to strategic goals that drive measurable outcomes.

Performance Improvement Capabilities

Enterprise Project Management and Execution
Informing
TSA’s Future
State
### Biometrics Solutions

TSA continues to refine and execute its strategy to leverage biometrics to enhance security effectiveness, increase efficiency, and improve the passenger experience.

#### Timeline:

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2015</td>
<td>Biometric Integrated Project Team (IPT) chartered</td>
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| 2017 | May: Demonstration: Biometric Authentication Technology (BAT) at ATL and DEN  
      | October: Pilot: TDC Biometrics (CBP/TSA Phase I) at JFK               |
| 2018 | May: Demonstration: Travel Document Checker (TDC) process automation  
      | August - October: Pilot: TDC Biometrics (CBP/TSA Phase II) at LAX      
      | November 2019: Pilot: curb-to-gate biometrics in ATL                  
      | Terminal F, coordination with CBP and Delta Airlines                  |
| Future| Late 2019: Pilot: TDC Biometrics system (CBP/TSA Phase III)           |

TSA is developing front end solution requirements, designing back-end system architecture, and demonstrating innovative solutions to gain lessons learned from field operations and address capability needs.

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**INFORMING TSA’S FUTURE STATE**

**Integrated Identity Verification System for Aviation Travelers**
Checkpoint Screening Solutions

Checkpoint CT

To meet emerging and evolving threats related to the aviation transportation sector, TSA must pursue sustained technology for checkpoint screening. The most impactful and suitable technology available today is the Computed Tomography (CT) technologies.

CT systems with a rotating x-ray gantry take helical scans of items to produce 3D images can be manipulated 360 degrees by the system operator.

On-Person

Requirements and Capabilities Analysis (RCA) is coordinating with various stakeholders and manufacturers to improve TSA’s on-person screening capability for a future, diverse screening environment that may leverage multiple screening methods per passenger risk.

QPL Development

Phase I: QPS 200

Phase II: QPS 201

Next Generation Demonstrations
Innovative Checkpoint Design and ACE

Checkpoint Requirements and Planning Guide
The Checkpoint Requirements and Planning Guide (CRPG) provides information for airports to design and build for the future processes of screening, the improvement of today’s passenger experience, and the flexibility to adapt to the checkpoint of tomorrow.

Currently installed at ACE are CT units, ASLs, WTMDs, and AITs, with more equipment to come.

Advancing the Checkpoint Environment
TSA is pioneering change in the transportation security ecosystem in collaboration with McCarran International Airport (LAS). LAS has dedicated an open checkpoint space to ITF for the purpose of demonstrating innovative solutions. This will be accomplished through collaboration with local TSA and LAS to house and accelerate the demonstration of multiple innovative capabilities.
Future Lane Experience (FLEX) Screening
Strategic Overview

Near Term
- Dedicate TSA Pre✓® lanes solely to KTN holders and meet other requirements of the TSA Modernization Act
- Enhance passenger queueing with the deployment of a new screening type
- Demonstrate and evaluate new screening equipment

Long Term
- Integrate checkpoint technologies to enable a seamless passenger screening experience
- Introduce dynamic switching algorithms to offer more tailored screening based on what is known about each passenger
- Capitalize on collaboration with industry and airport authorities to optimize FLEx
Concept of Operations

Known Traveler Number Differentiation - Spring 2019 (BOS & BNA)

Queue Differentiation - Summer/Fall 2019 (TBD)
Thank you.