

DHS SCIENCE AND TECHNOLOGY

Passenger Self-Screening



**Homeland
Security**

Science and Technology

4 May 2021

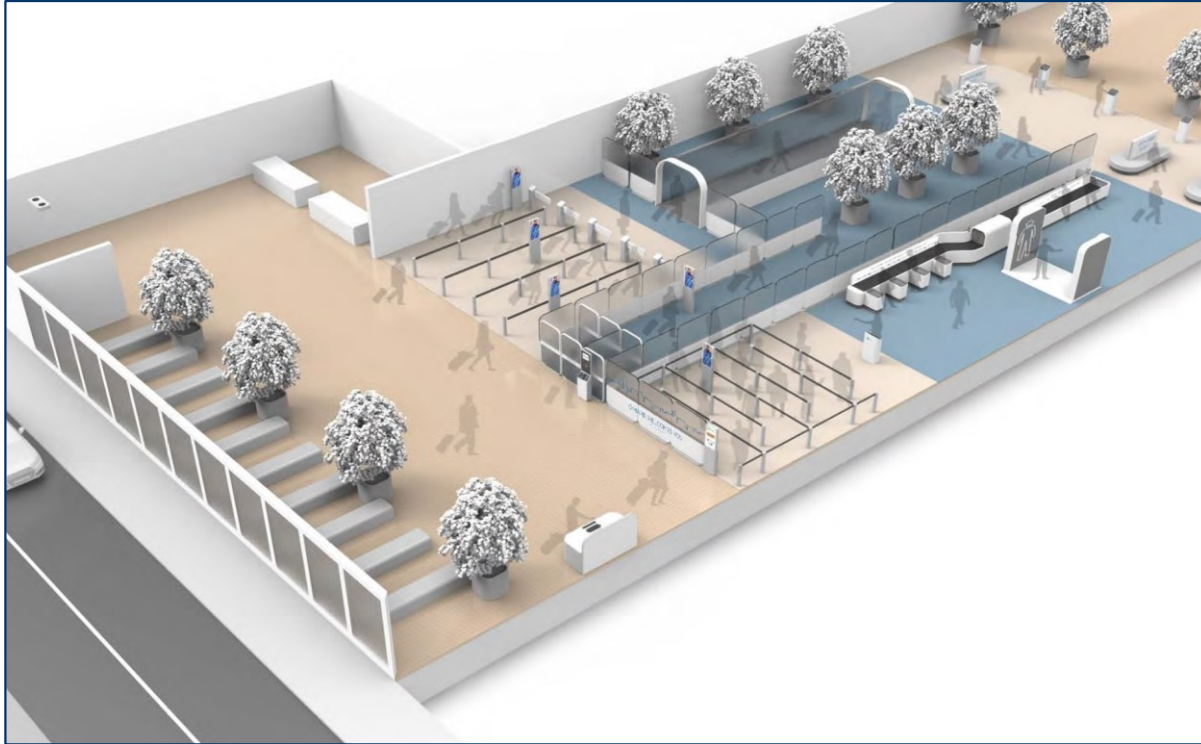
Dr. John Fortune

Screening at Speed

Mission Support and Capability

Science and Technology Directorate

Screening at Speed Overview



Project Thrust Areas

Passenger
Screening

Passenger
Analysis

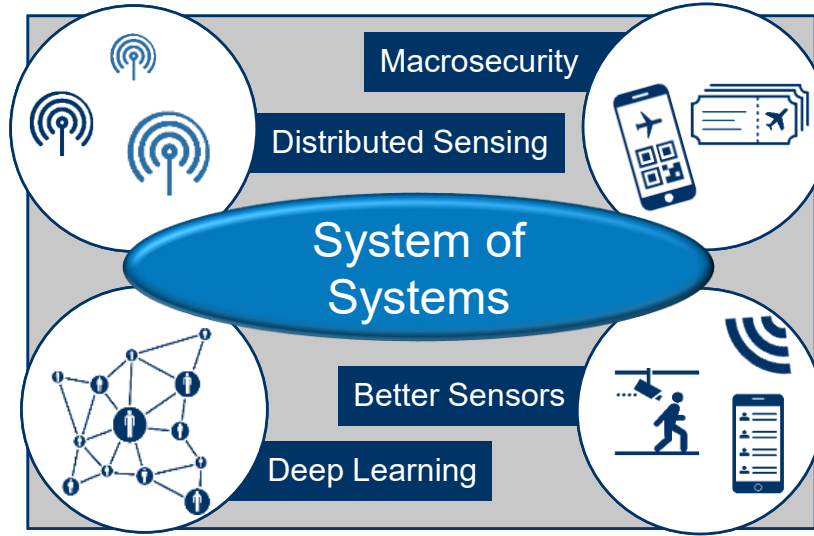
Carry-On
Screening

Overarching
Architecture

Enabling
Capabilities

Screening at Speed pursues transformative R&D to increase security effectiveness from curb-to-gate while dramatically reducing wait times and improving the passenger experience.

Screening at Speed Mission



Problem

The number of air travelers continues to rise, and new threats continue to emerge

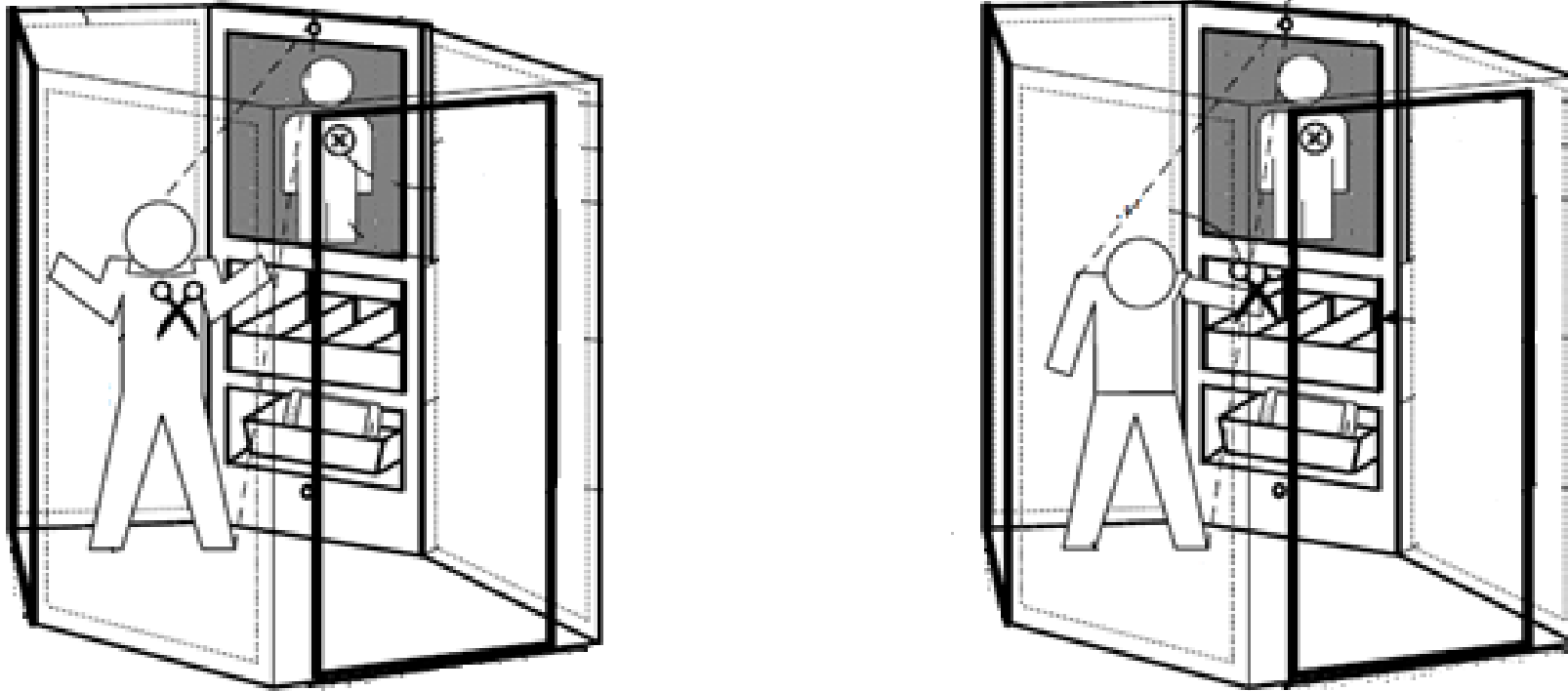
Solution

Seamless, integrated curb-to-gate sensors array and enhanced detection algorithms

Impact

Improved detection, fewer secondary inspections, lower screening costs, and faster throughput

Self-Screening Concept



Self-Screening is a system-of-systems that allows an individual to complete the screening process and resolve system alarms independent of outside instruction or oversight.

Key Self-Screening Objectives

What activities can we automate based on these objectives?

Compactness

- Components as small as possible, while still meeting screening quality standards and providing a comfortable passenger screening environment.

Independent Passenger Utilization

- System components and alarm outputs should be intuitive for passengers, without the need for TSO guidance.

Security by Design

- System components and security processes should achieve all necessary security objectives without the need for additional action (outside of carry-on divestment by the passenger).

Minimal Supervision

- Screening technologies, access control, and security processes should effectively ensure compliance with, and completion of, security requirements with minimal TSO supervision.

Modularity

- Compatible solutions working together to build a self-screening framework.



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DIVERSE PERSPECTIVES + SHARED GOALS = POWERFUL SOLUTIONS