

Presentation

Risk-Based Flexible Strategic Planning and Regulatory Harmonization

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Overview



- Security Planning Challenges
- A Flexible Strategic Planning Framework
- Developing Sustainable Security Solutions
- Case study – U.S. Checked-Baggage Screening
- Regulatory Harmonization and Sustainable Security Solutions
- Finding the Global Middle Path



Challenges of Security Planning – Threats and Standards



- Evolving threats and accordingly changing security standards
 - ICAO/ECAC
 - TSA
 - Other AVSEC regulators
- Separate historical development paths
- Minimal security standards not globally harmonized
- Uneven security standards
 - Checked baggage screening
 - Checkpoint screening
 - Air cargo screening



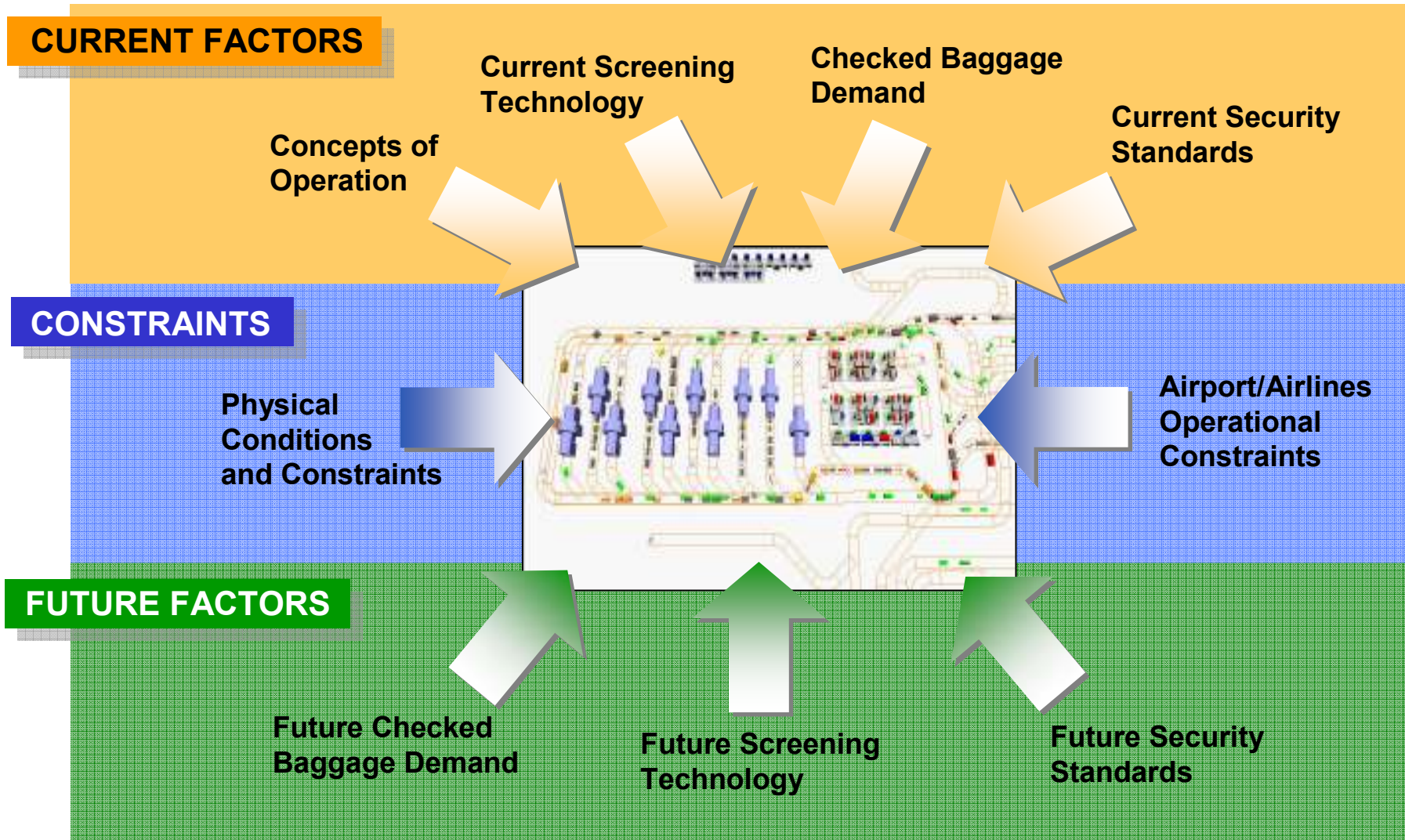
Challenges of Security Planning – Technology



- **Fast developing screening technology**
 - Single-view AT and Multi-view AT
 - 1st and 2nd generation CT-based EDS and Stationary-Gantry CT
 - Myriad of technology upgrades and updates
- **Different concepts of operation based on uneven local standards**
 - U.S. EDS-based screening solutions and flexible planning approach
 - EU standardized and cost-efficient AT-based solutions meeting evolving standards
- **Varying performance measurement methods**



Flexible Strategic Planning Framework and Sustainable Security Solutions



Sustainable Security Solutions – Operational and Spatial Considerations



DATABASE



- Physical Infrastructure
- Terminal Assignments

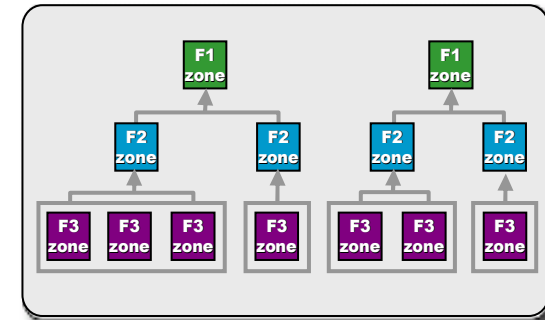


ANALYSIS

- Terminal Zones for Various Types of EDS Systems
- Airline Assignment to Zones
- Existing Screening Equipment

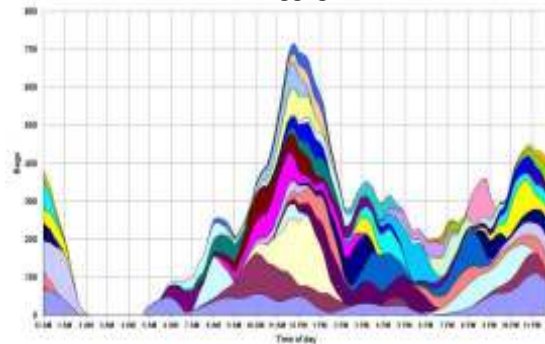


PRODUCT



Mapping of Baggage Flow to Infrastructure

Estimated Baggage Flow



- Passenger Flight Schedules
- FAA Terminal Area Forecast
- Airline Traffic Data
- Pre-clearance Sites
- Passenger Characteristics



- Peak Day Peak Month
- Average Day Peak Month
- Airport Growth Profile
- Flight Load Factors
- % of Originating Passengers
- % of International Rechecked Passengers
- % of International Pre-cleared Passengers
- Average Number of Checked Baggage Per Passenger



Sustainable Security Solutions – Universe of Alternatives

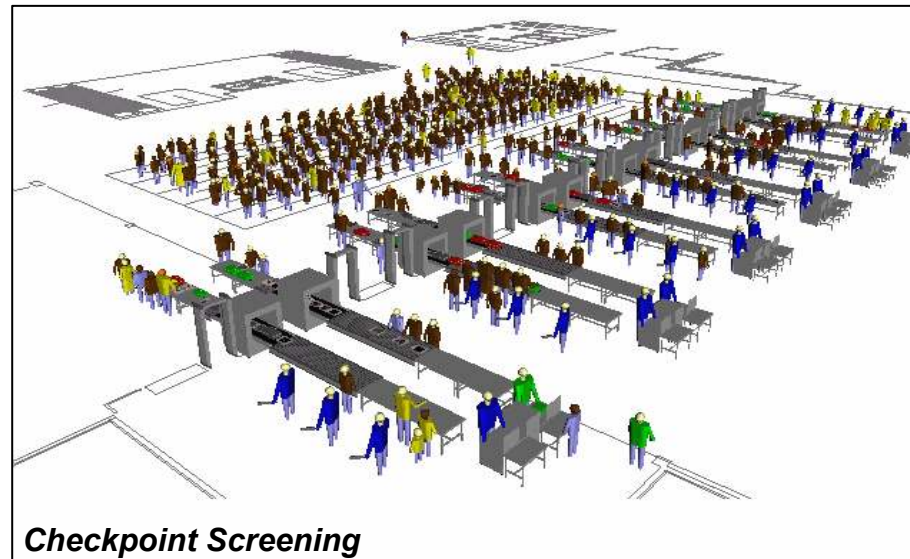
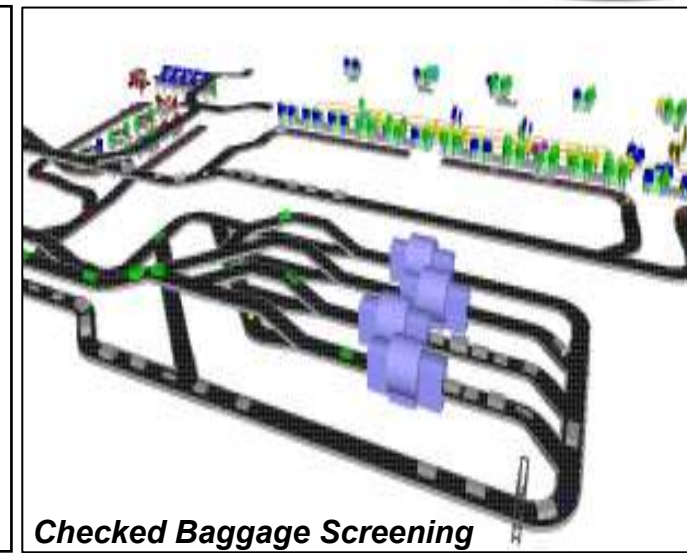
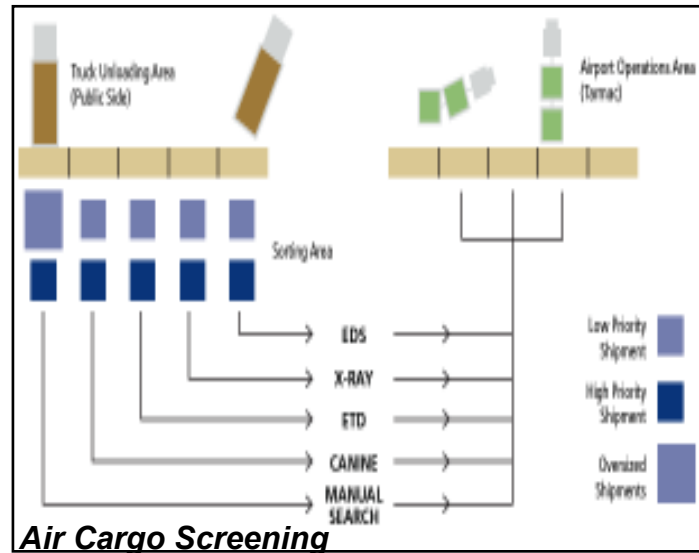


- Thorough feasibility studies:

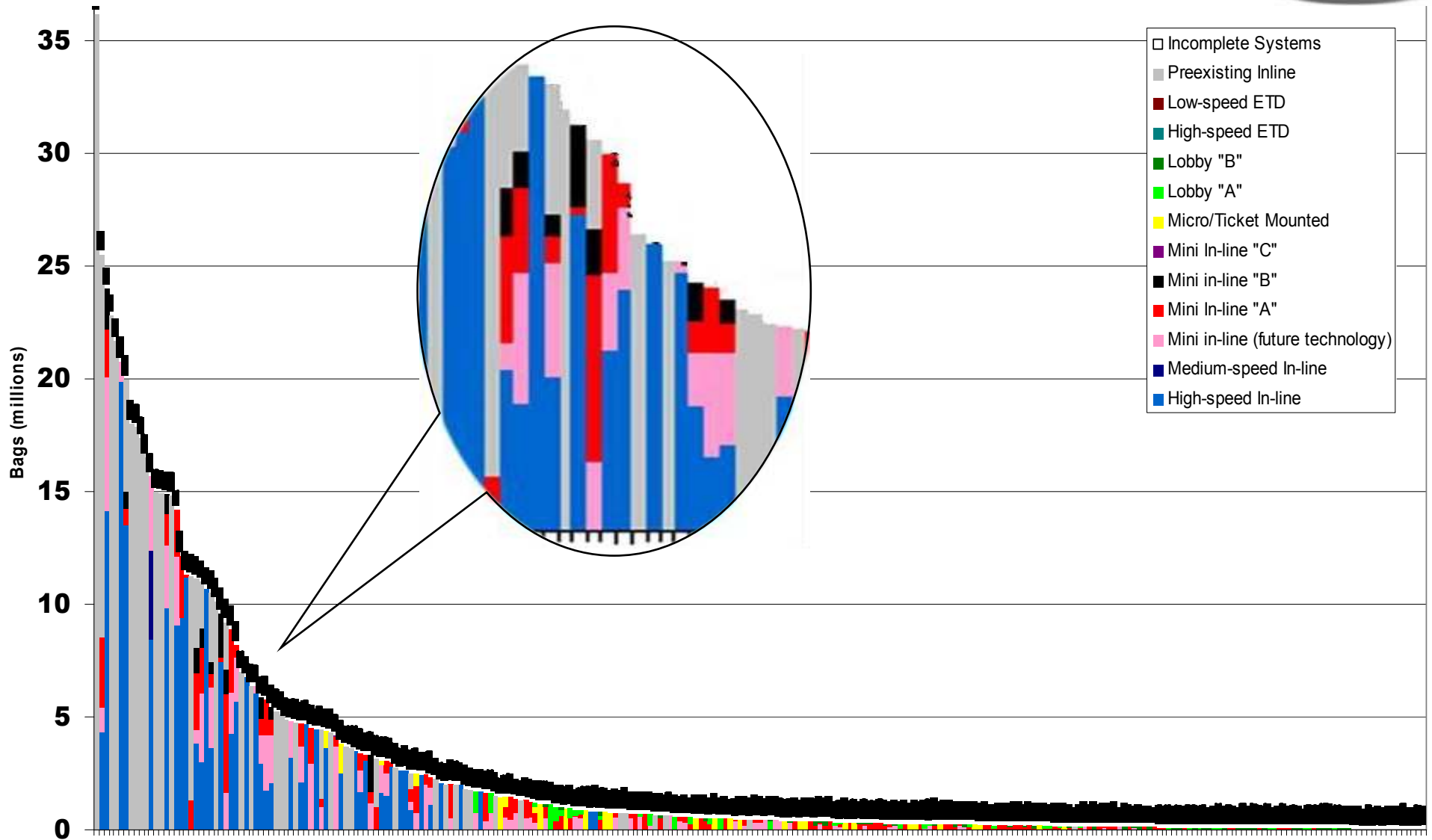
- Spatial
- Operational (Simulation Modeling)
- Economic (Life-Cycle Cost Analysis)

- Establish optimization function (security, operations, cost-savings, etc.)

- Multi-faceted determination of preferred alternatives



Navigating the Maze of Many Security Solutions – U.S. Checked-Baggage Screening Example

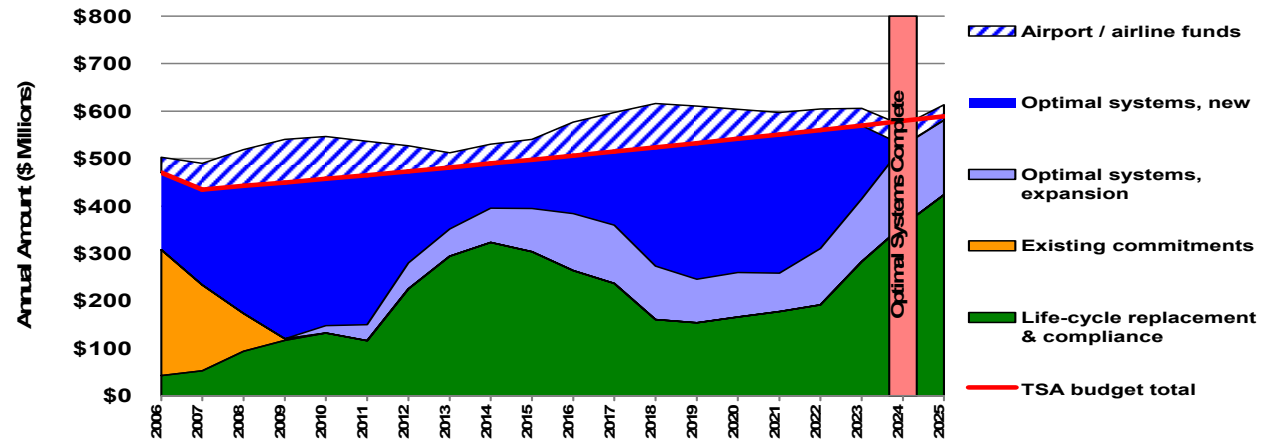


Sustainable Security Solutions – Scenario Based Planning

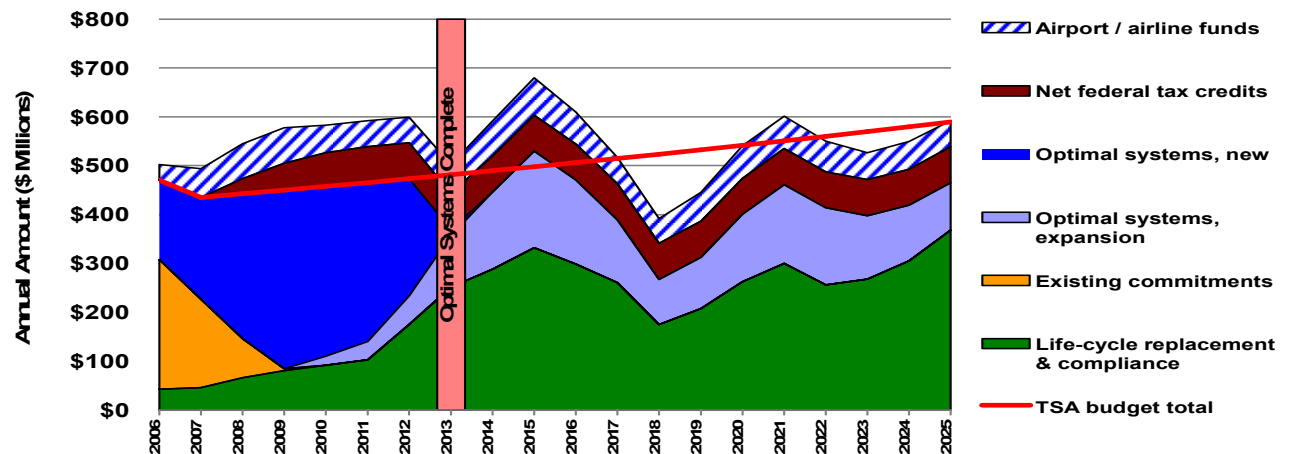


- Scenario comparison can facilitate assessment of:
 - Impacts of new technology
 - Effects of process changes
 - Policy and budget implications
- Extensive scenario testing is crucial for developing a risk-based security approach

Annual Purchase and Installation Funding Requirements
Current Funding Approach Scenario



Annual Purchase and Installation Funding Requirements
Tax Credit Bond Program Scenario



Source: Baggage Screening Investment Study Working Group Report, August 2006.

Note: Figures shown do not necessarily represent the current timeline for deployment of optimal screening systems

Global Aviation Security – Finding the Best Middle Path



- A single chain as strong as it's weakest link
- Harmonized minimal security standards can:
 - Facilitate more efficient use of valuable resources
 - Improve passenger experience which supports industry growth
 - Strengthen the “security chain”
- Value added when security mandates also meet commercial needs
- Leverage best practices and lessons learned
- The goal: risk-based, flexible and sustainable global security solutions

