IATA

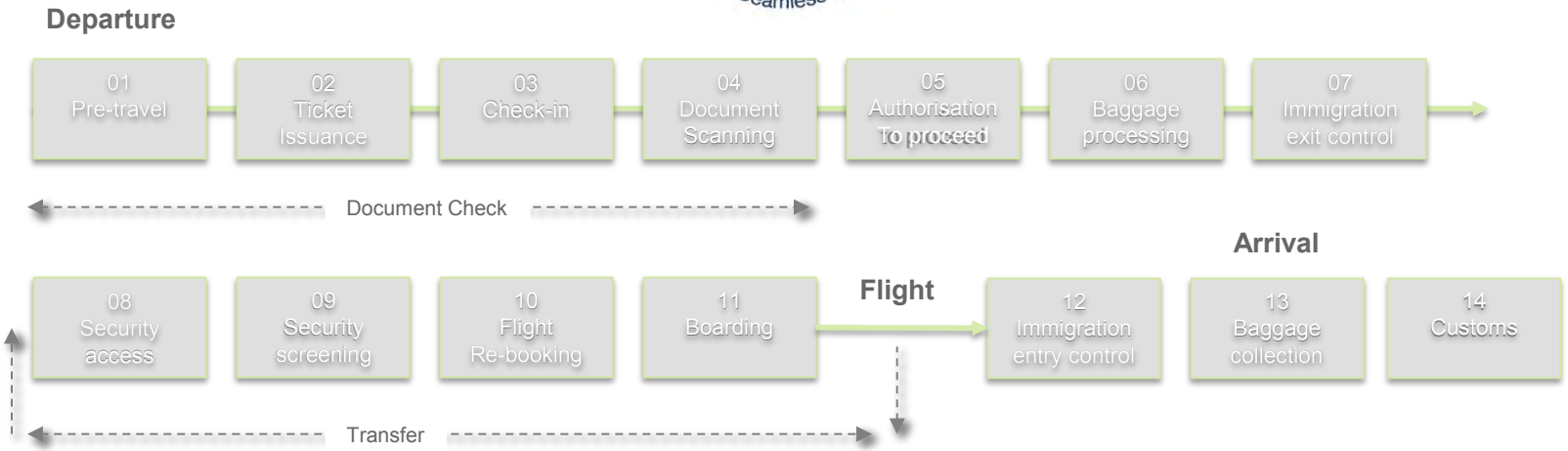
Atlanta, 7 September 2014

Filipe Reis
Regional Head – The Americas
Airport, Passenger, Cargo & Security

ACI and IATA cooperation

- The ACI – IATA new MoU was signed on October 2nd 2013
- Several Annexes to the MoU were signed on December 5th 2013 (SmartSecurity, SAE, ABC)

Passenger Experience



By 2020, 80% of global passengers will be offered a Secure Fast Travel experience

A Fast Passenger

10 minutes to **DUTY FREE** / **30** minutes to **TAXI**

Fast Travel Program

CONTROL

CONVENIENCE

CHOICE

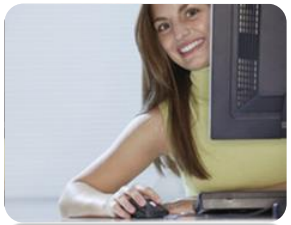
FAST TRAVEL

→ Check-in

Check-in

Kiosks

Web



Mobile/Automated

Check-in

Mobile Check-in - NFC

- Special stream under Fast Travel to cover NFC and Mobile Services
- Business Requirements and Use Cases developed
- **Joint IATA / NFC Forum Reference Guide for Air Travel Oct 2013**
- IATA / GSMSA White Paper early 2011
- Identification of possible industry standards to develop to support implementation

Check-in

7144
AL / AP Pairs

84% of passengers are offered with self-service check-in

FAST TRAVEL

→ Bags Ready-to-go

Passenger Baggage Processing

The Problem

While self-service check-in is massively offered to passengers by airlines, baggage check-in remains a difficult process. Passengers having checked-in via a self-service channel still have to stand in long queues only to drop their bag

The Solution

Increasing significantly passengers through put at bag drop locations by allowing passengers to print and apply their bag tags themselves and offer a dedicated touch point for baggage acceptance only

Where is this initiative coming from?

- It's what the passenger wants
- A better airline and airport experience
- Airlines wanting to reduce operation costs

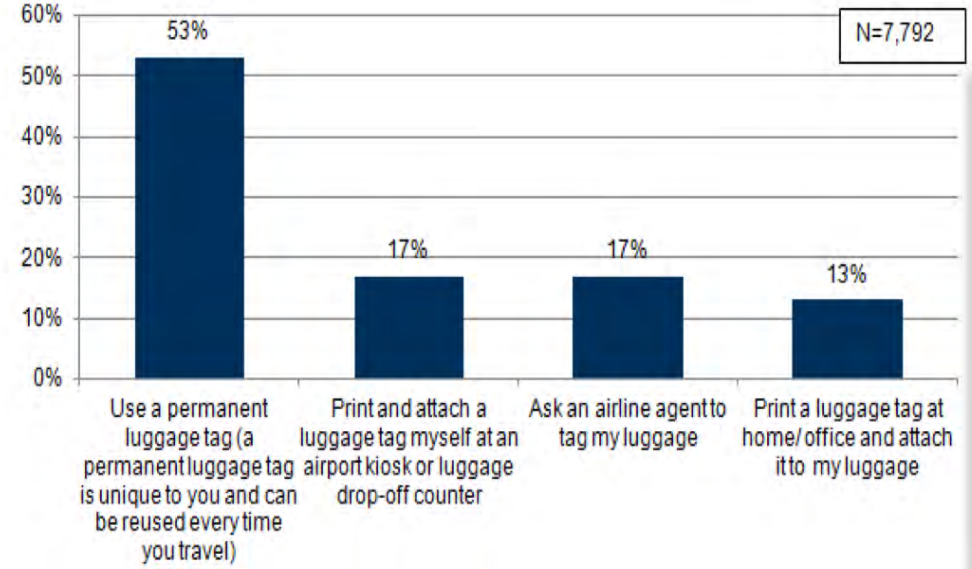


Figure 39: Preferred option for preparing your luggage for your flight

"More than half (53%) of air travellers would prefer to use a permanent luggage tag that is unique to them and can be reused every time they travel."

⑩(IATA Global Passenger Survey, 2013, 7792 respondants)

Bags Ready to Go

301

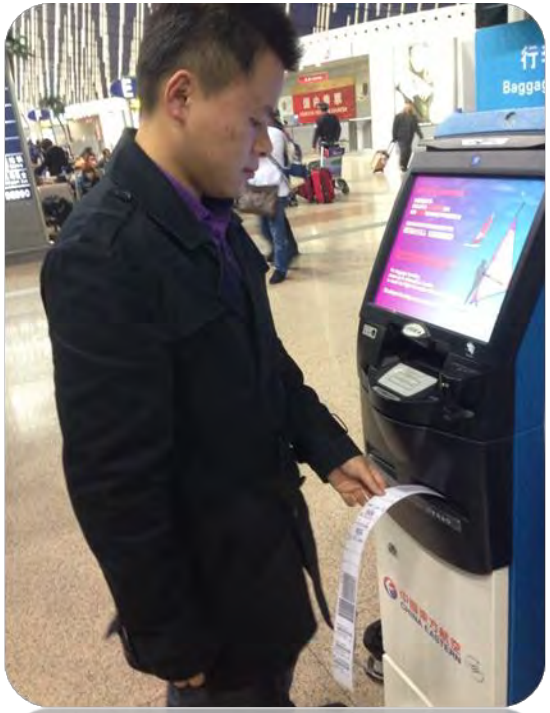
AL / AP Pairs

18%

of passengers are offered with self-tagging

Passenger Baggage tagging options

Self Service Kiosk



Home Printed (new)

Electronic Tag (new)

Advances in Self-Service- Bags Ready to go

Self Service Kiosk tagging

Check in and print and self tag the bag at a kiosk. Bag tag activated once accepted at a baggage drop

Printing at Home

A cost effective option that allows a passenger to print their bag tag from home and arrive at the airport and just drop and go

Electronic Tagging

An electronic baggage tag that the passenger can program using the airline smart phone application – or the airline can control – that uses an electronic display to show the baggage journey information

What are the big changes as result of the new tagging options?

Baggage Claim Receipt Tag

The existing paper baggage claim receipt cannot be included on these new baggage tag formats. A electronic solution is needed, (Electronic Baggage Claim Receipt, Resolution 752)

Bingo Reconciliation Stubs

The 3 small barcode paper stubs will not be included. This means there can be no manual reconciliation and therefore a more efficient automated scanning system must be introduced.

Implementing Home Printed and Electronic Bag Tags

Important and latest information - USA

TSA announced their intended (not yet signed off) new policy for Self-Tagging:

- All carriers, operating flights both to and from the US, would be allowed to introduce all forms of self-tagging without restrictions.
- Only restriction: airline representative must performs positive ID check.

FAST TRAVEL

→ Document Check

Document Scanning

An airline offering the ability for a passenger to self-scan travel documents to perform automated verification of the travel document data against travel data requirements.

Document Check

2402

AL / AP Pairs

45%

of passengers are offered with self-service document check

FAST TRAVEL

→ Flight re-booking

Flight Re-Booking

In the event of an irregular operation such as flight delays, misconnects or cancellations

An airline offering the ability for a re-routed passenger to get proactively re-booked and deliver their new boarding token or re-booking options via a self service channel.

Flight Re-Booking

4270

AL / AP Pairs

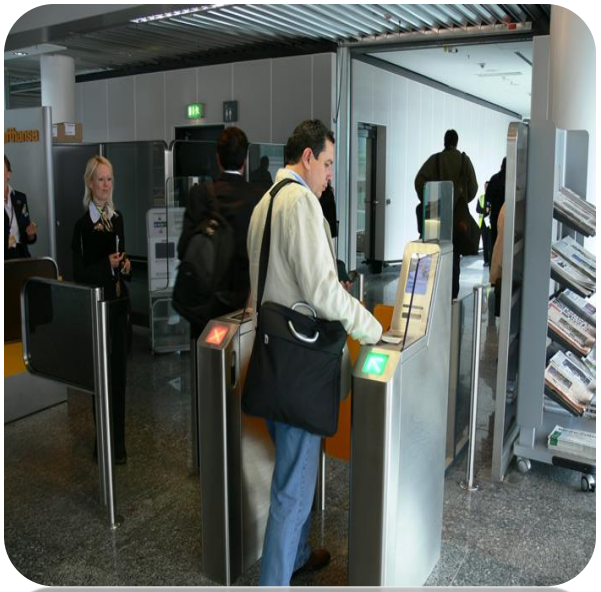
60% of passengers are offered with flight re-booking

FAST TRAVEL

→ Self-boarding

Boarding

An airline offering the ability for a passenger to self-scan their boarding token to gain entry to the aircraft in a controlled manner.



Self Boarding

1942 / 343

AL / AP Pairs

41%

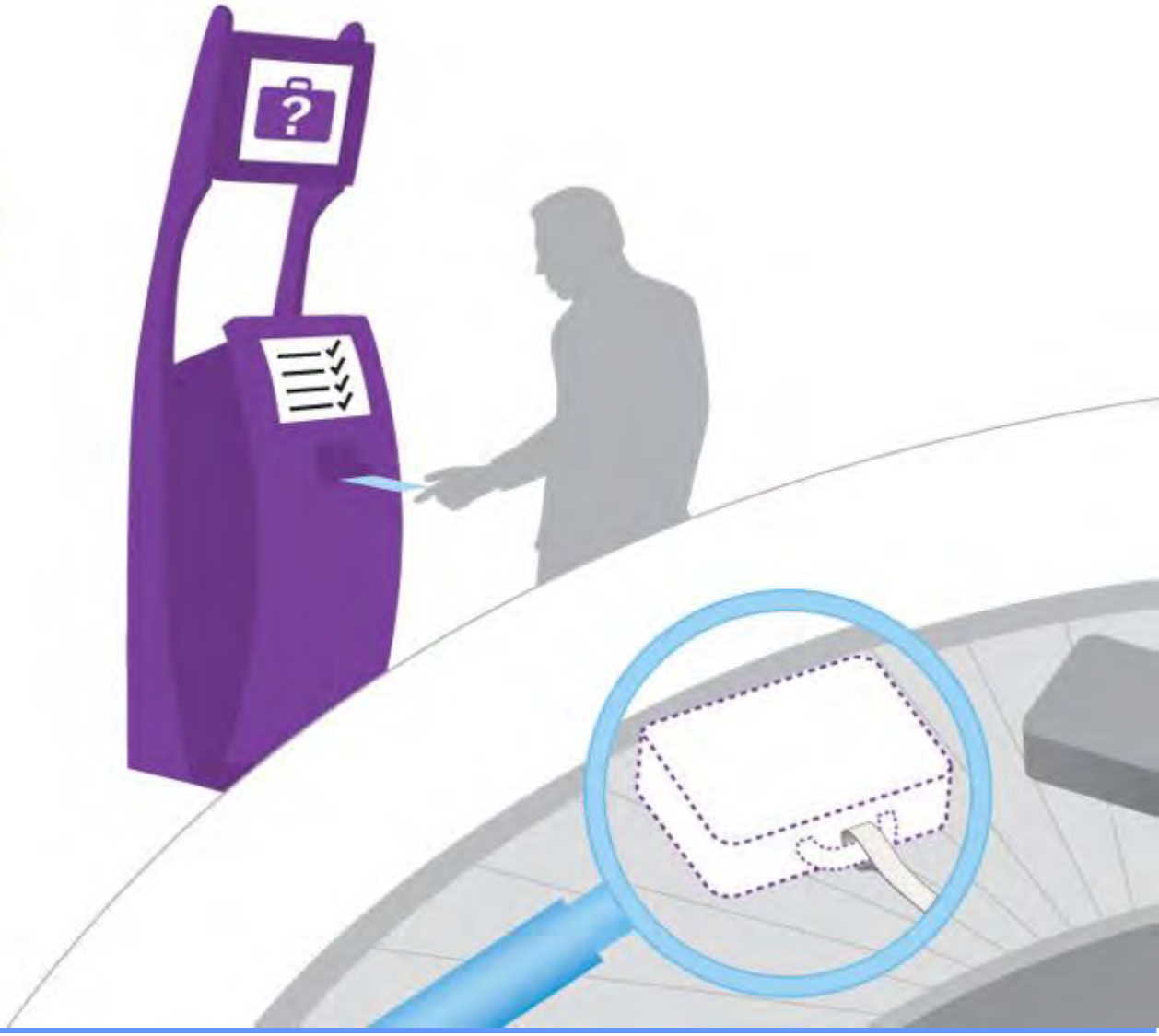
of passengers are offered with self-boarding

12.5%

With Self Boarding Gates

FAST TRAVEL

→ Bag Recovery



Baggage Collection

An airline offering the ability for a passenger to register a mishandled bag, utilising a self-service device (kiosk, mobile, web)

Bag Recovery

1368

AL / AP Pairs

24% of passengers are offered Bag Recovery

TOP 18 Fast Travel Airlines

	% of Airline Passengers offered with Fast Travel
SK –Scandinavian Airlines Systems	90.01%
QF – Qantas Airways Ltd.	80.83%
AC – Air Canada	71.56%
HA – Hawaiian Airlines	69.01%
NZ – Air New Zealand	68.34%
AF – Air France	68.08%
LX – Swiss International Airlines	62.52%
AA – American Airlines	61.29%
AY – Finnair	55.27%
AS – Alaska Airlines	53.59%
SN – Brussels Airlines	52.83%
IB – IBERIA	52.35%
LH – Deutsche Lufthansa AG	52.01%
TF – Malmo Aviation	49.95%
OS – Austrian	49.83%
EY – Etihad Airways	49.34%
CX – Cathay Pacific Airways	48.62%
KL – KLM Royal Dutch Airlines	48.60%

Passenger Facilitation

Automated Border Control (ABC)

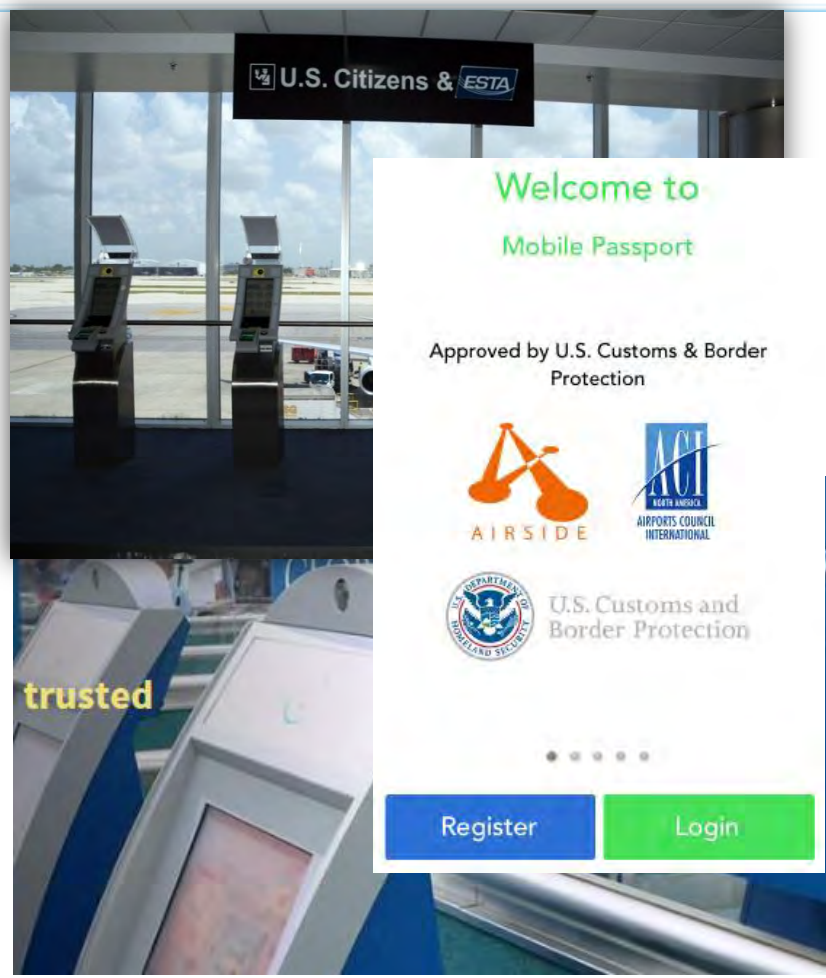
- Improve border crossing through the promotion of ABC
- Expedite Nationals and low risk passengers through ABC

Direct Benefits

- Average Border Crossing can be cut from 2 – 3 minutes to below 30 seconds

Solutions for automation

- ePassports or ID cards containing biometric data
- Registered Traveler Program



Hiring additional resources is not always solution

Solutions for Automation

e-Passport

e-Passport symbol

The electronic chip contains the passport holder's photo, and may contain fingerprints/iris

Citizenship

The chip may include the holder's fingerprint, iris scan and facial recognition

Registration

Applicants are fingerprinted, photographed, background checked and interviewed. The chip contains a reference number which will be linked to a database

Passenger Facilitation Program

AIRPORTS COUNCIL INTERNATIONAL

Security Access & Egress

Key Facts and Figures

Traffic forecast 2013 - 2017

- ↗ Global increase by 5.8% annually

Consequences

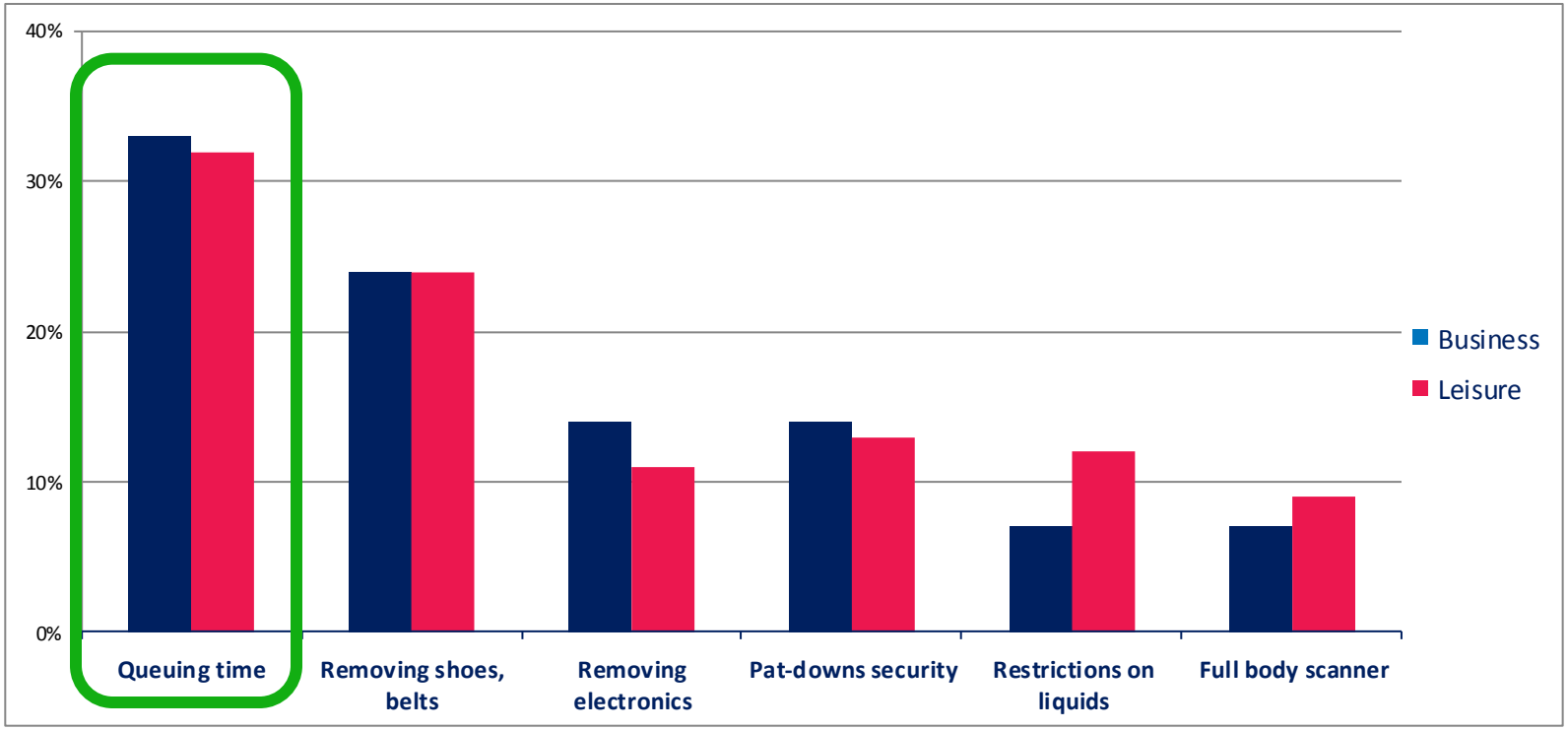
- ↗ Long queues, delays
- ↗ Increase in security tax

Solutions

- ↗ Improve existing process at Security
- ↗ Smart Security

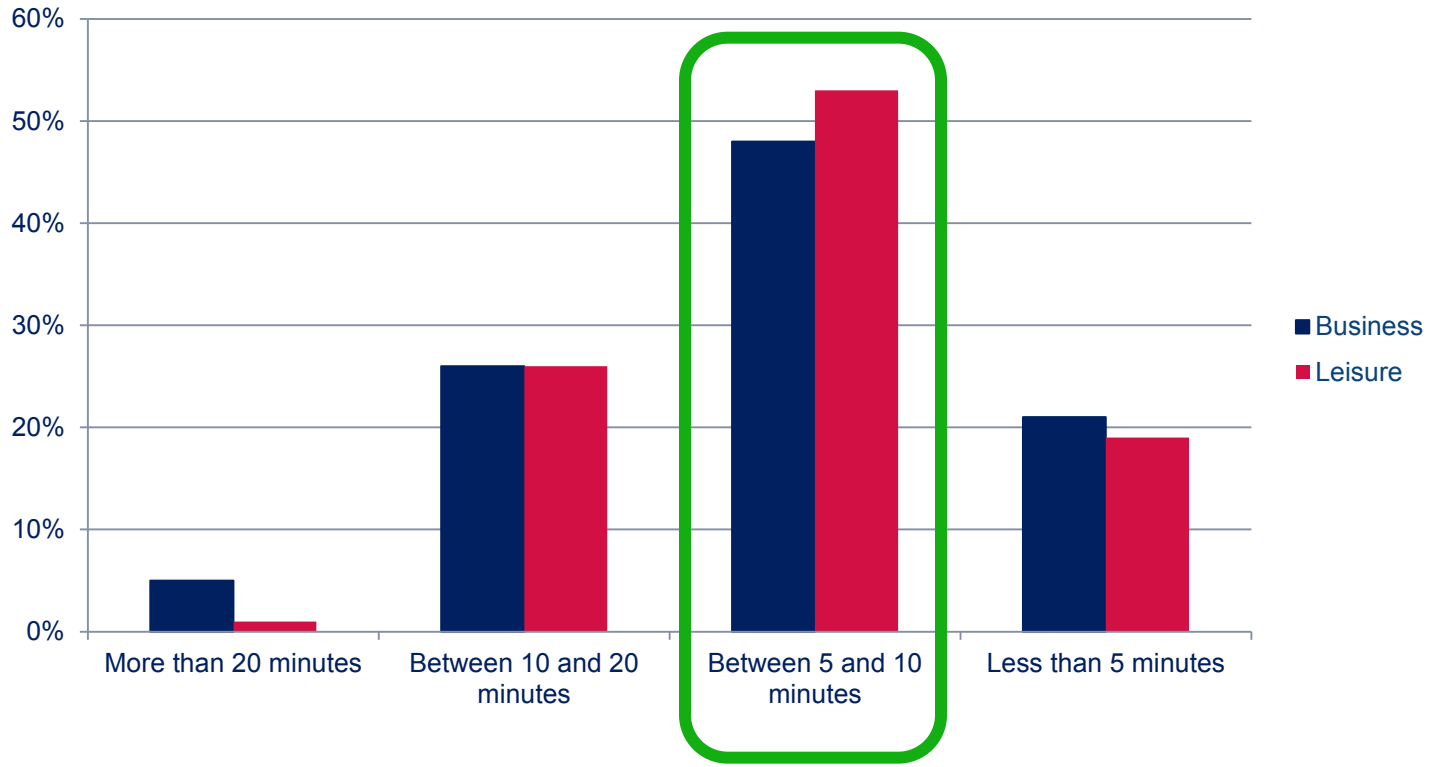
The most frustrating element at Security

- Air Travel Survey conducted with 8000 Passenger worldwide



Acceptable Queuing Times

- Air Travel Survey conducted with 8000 Passenger worldwide



Adding more screening lanes is not always solution

Is there a solution?

2010 Process Study

- Conducted at various airports to identify best practices
- Data collection from 142 Airports world wide

2011 ACI & IATA Documents

- Recommended Practice
- Implementation Guide

2012 Pilot Project

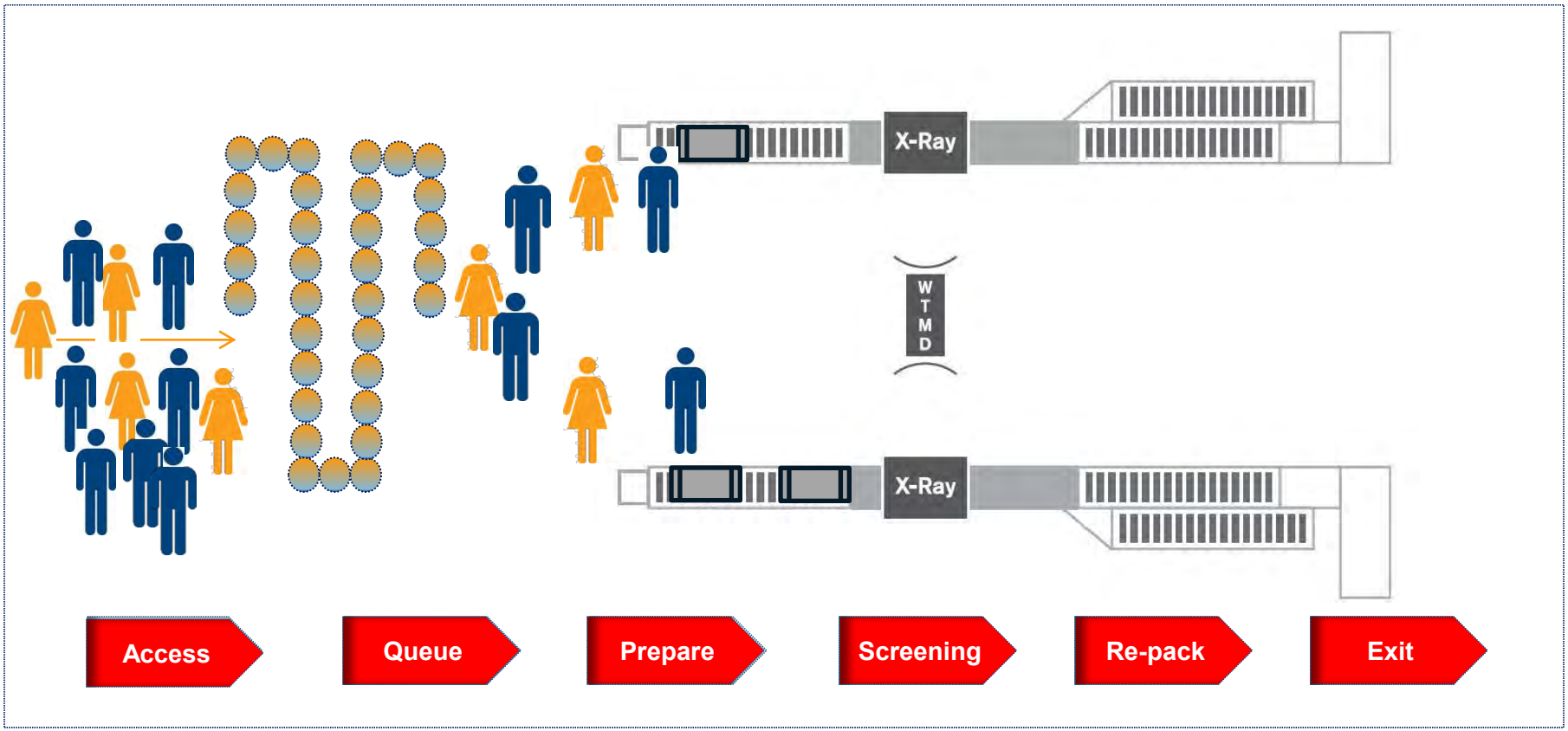
- Process Improvement Questionnaire
- Conducted at 6 Airport

2013 Roll out

- 14 airports visited

2014 Mass Implementation

Security Screening Process Flow



Passenger Information

Passenger Information before entering the queue

Posters & Bins

↗ London Heathrow Terminal 5

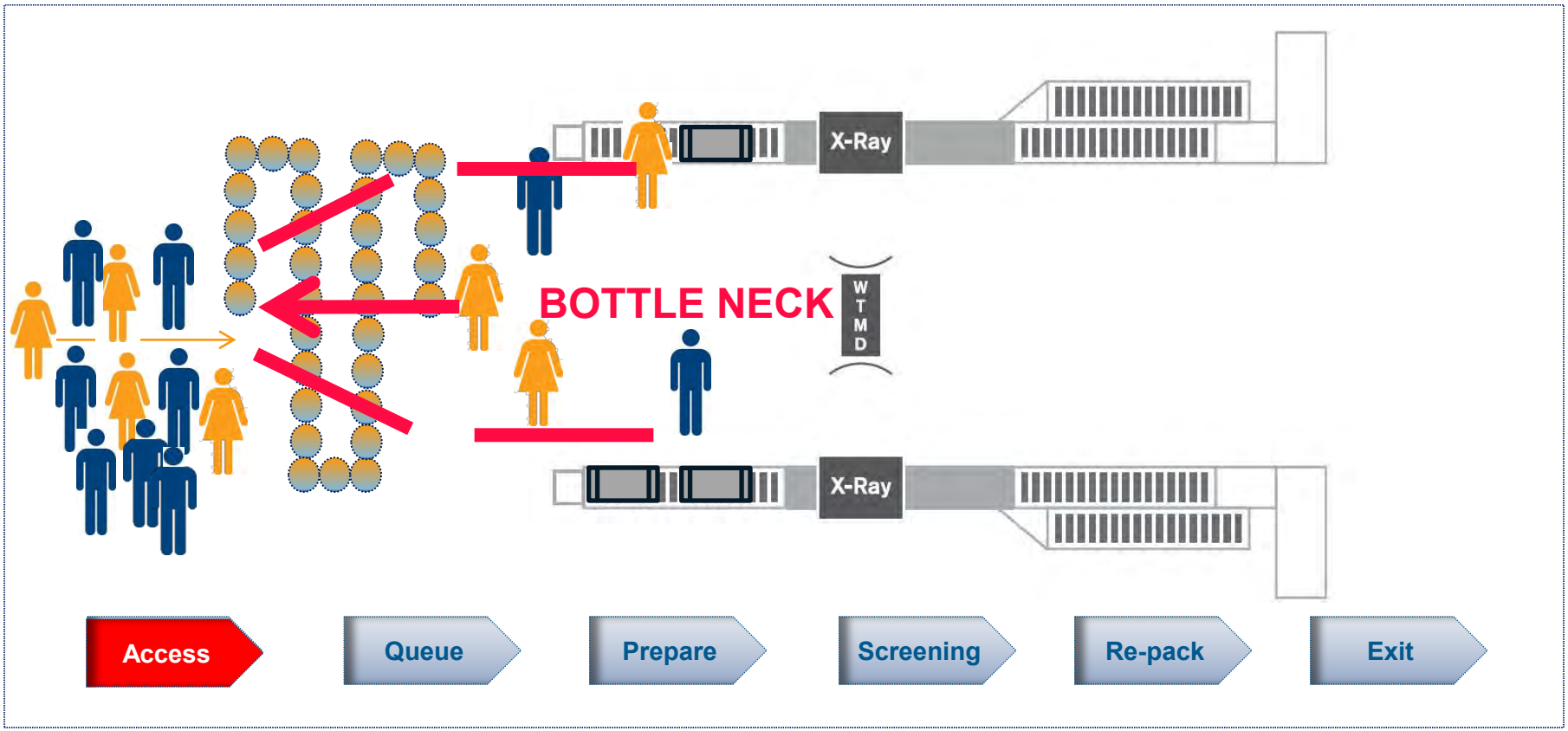
Posters & Bins

↗ Kansai Airport

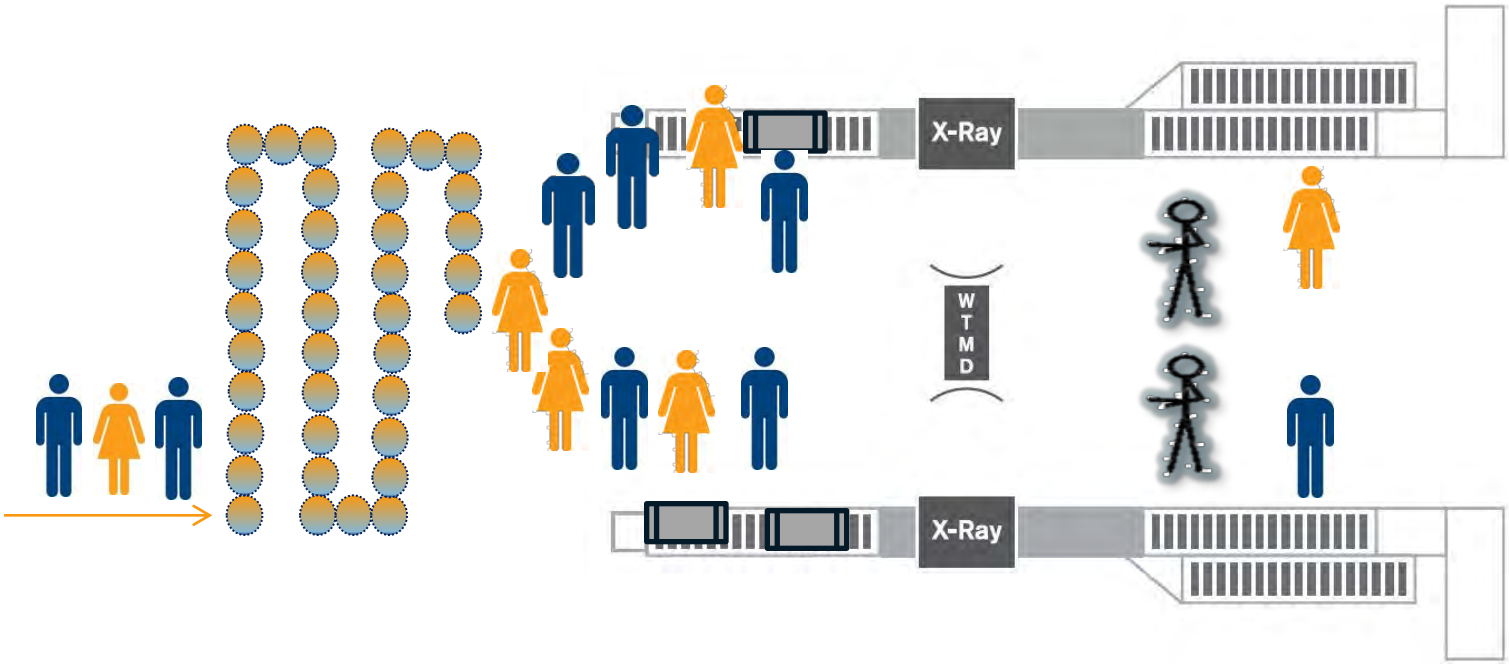
Posters & Bins

↗ Rome-Fiumicino Airport

Passenger Process Flow - Access

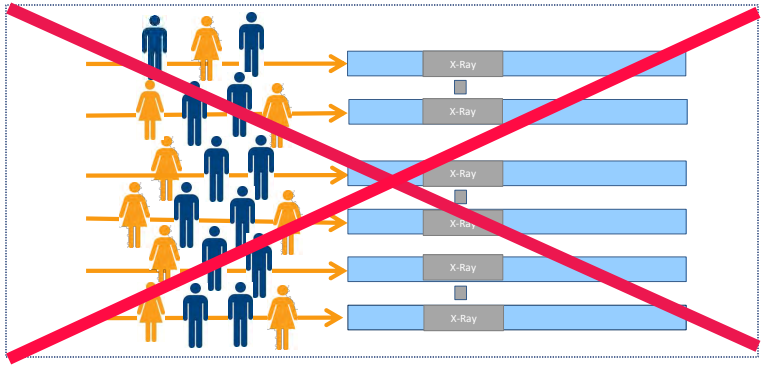


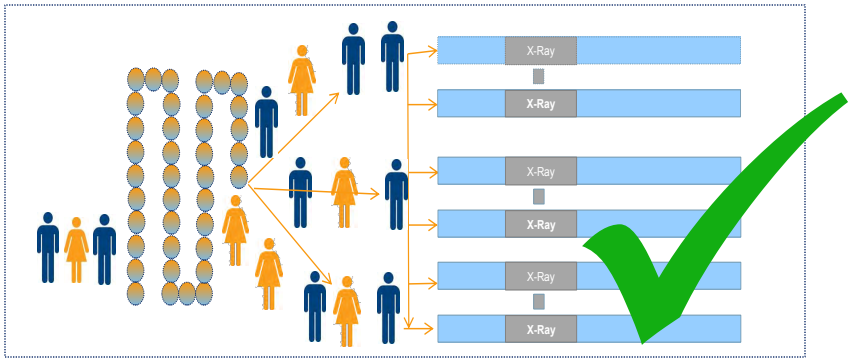
Passenger Process Flow - Queue



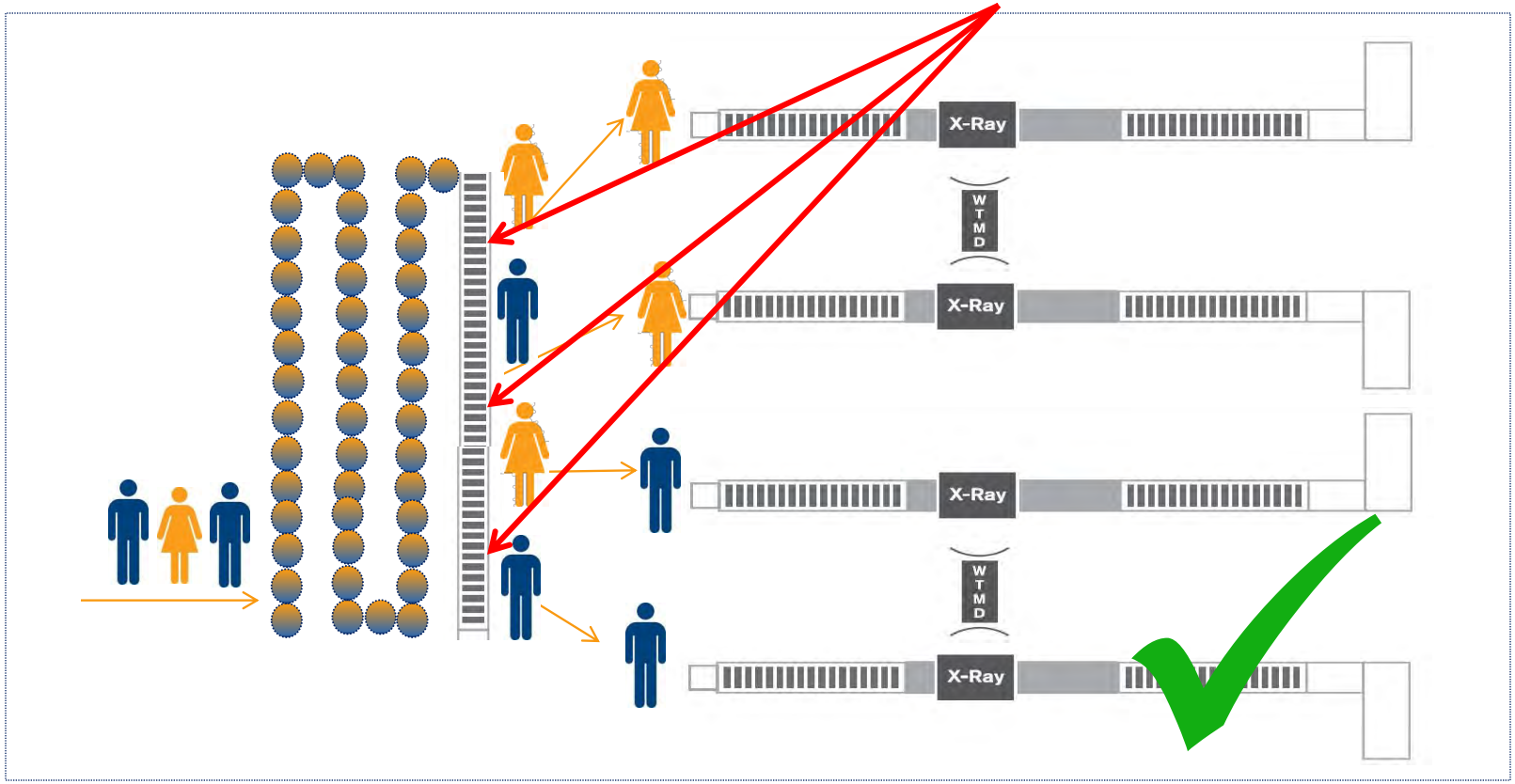
Queuing System

- Single queue serving multiple screening lanes
- Flexible tensa barriers
- Queuing System should be adaptable depending on:
  - Passenger mix
  - High and low peak hours

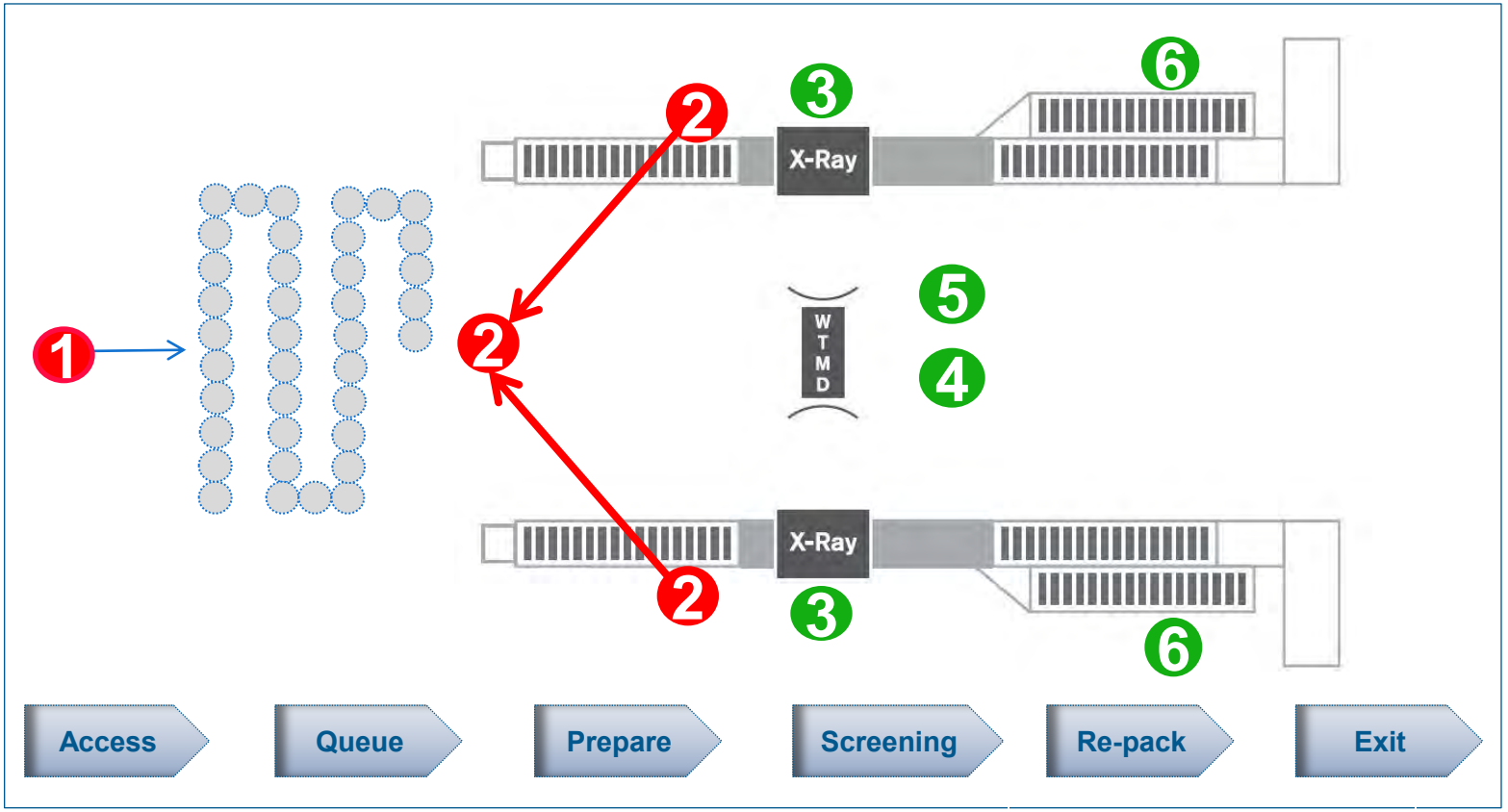




Preparation Area

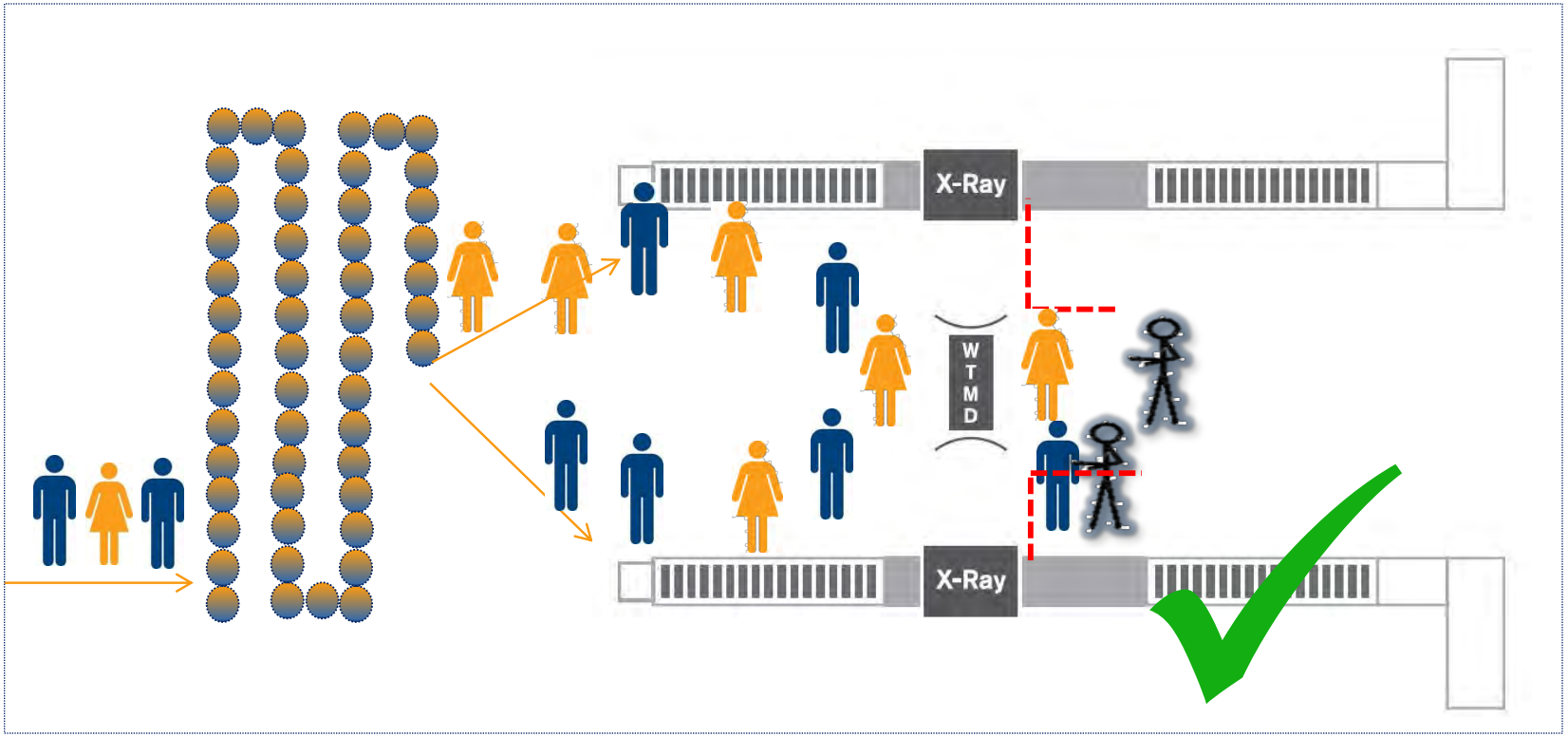


Staff allocation – Assist Passenger prepare



1. Queue Manager
2. Tray Loader
3. Screener
4. Female Searcher
5. Male Searcher
6. Secondary Searcher

Secondary Passenger Search



Real Time Information

What is important

- Government, Airports and Airlines should work together
- Consistent and timely Passenger information
- Establishment and monitoring of performance metrics

Security Access & Egress Roadmap 2014

SMART SECURITY

Next Generation Passenger Screening

the evolution is underway

ACI AIRPORTS COUNCIL INTERNATIONAL

IATA

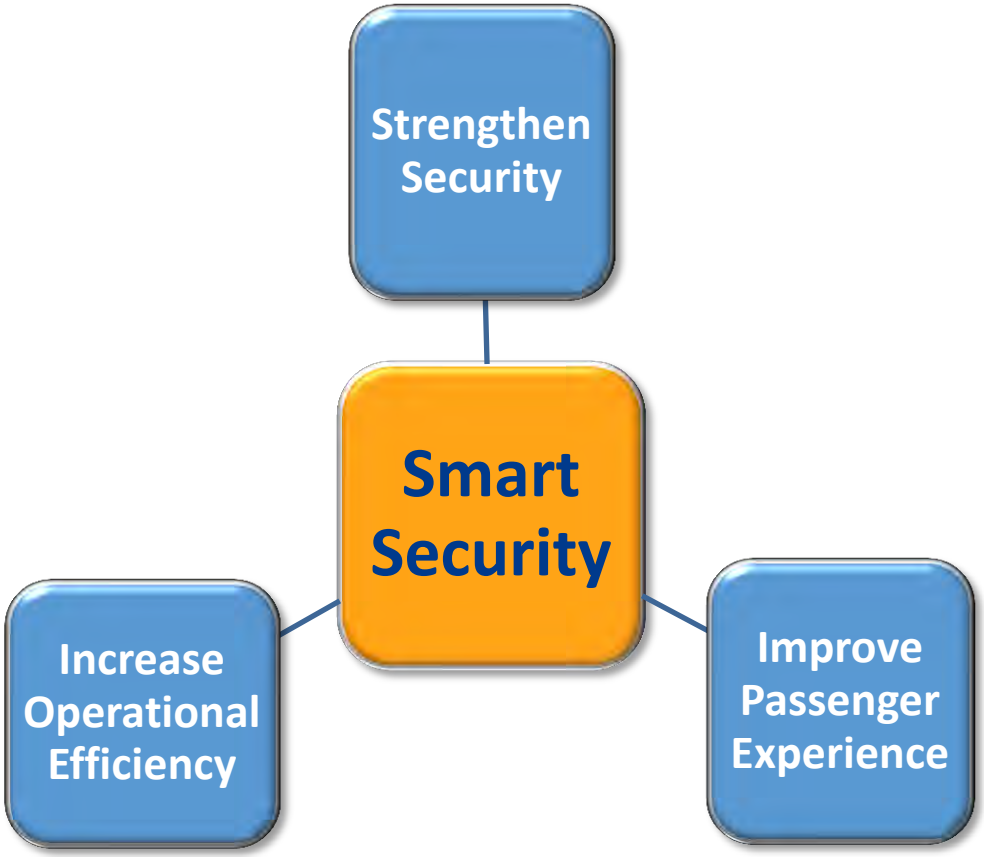
Smart Security

A joint IATA – ACI program

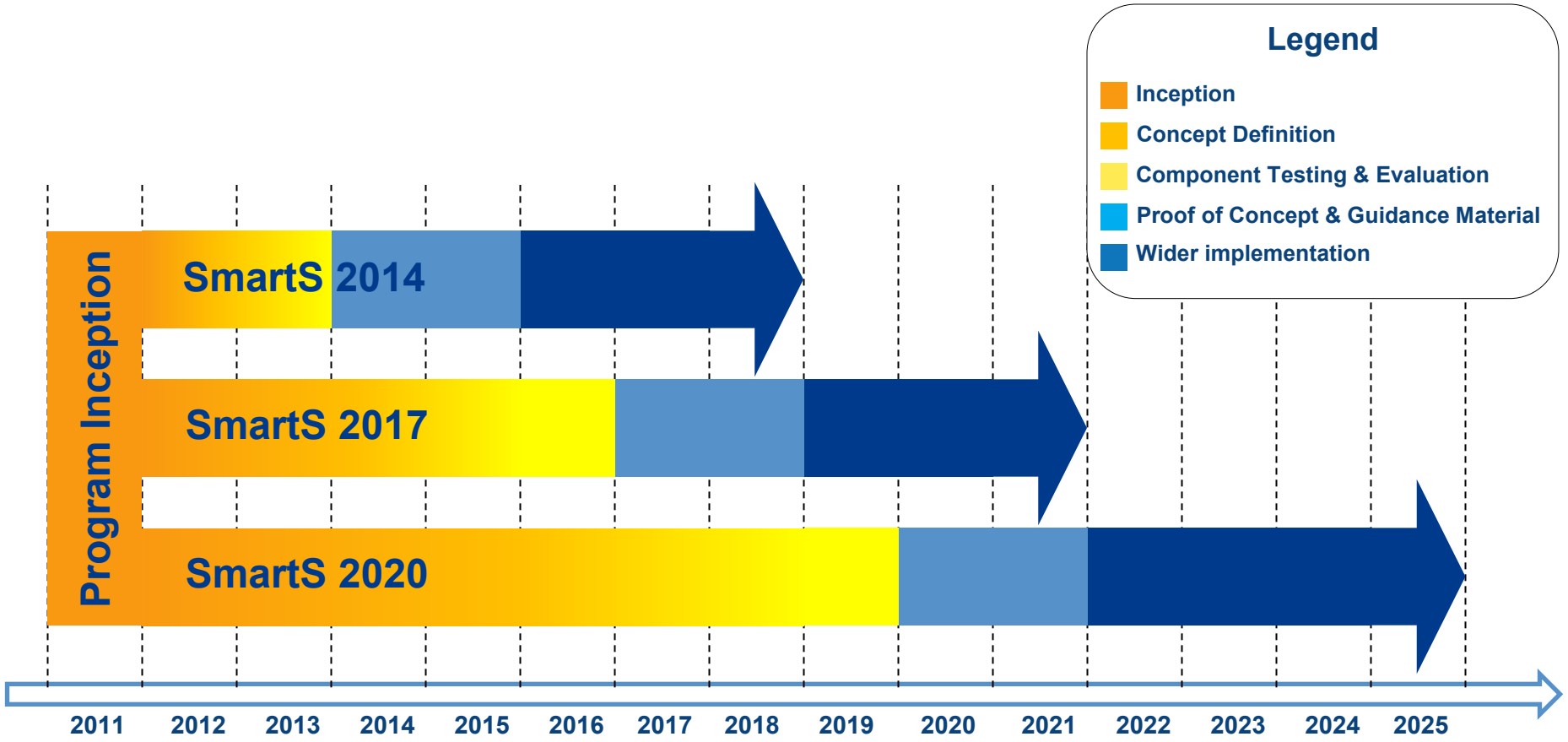
- IATA and ACI agreed to join efforts, pool resources and merge their respective initiatives in next generation passenger screening under the joint Smart Security program

- Our vision is to improve the journey from curb to airside, where passengers proceed through security checkpoints with minimal inconvenience, where security resources are allocated based on risk, and where airport facilities can be optimized

Objectives


Strengthen Security
Smart Security
Increase Operational Efficiency
Improve Passenger Experience

How will we get there?

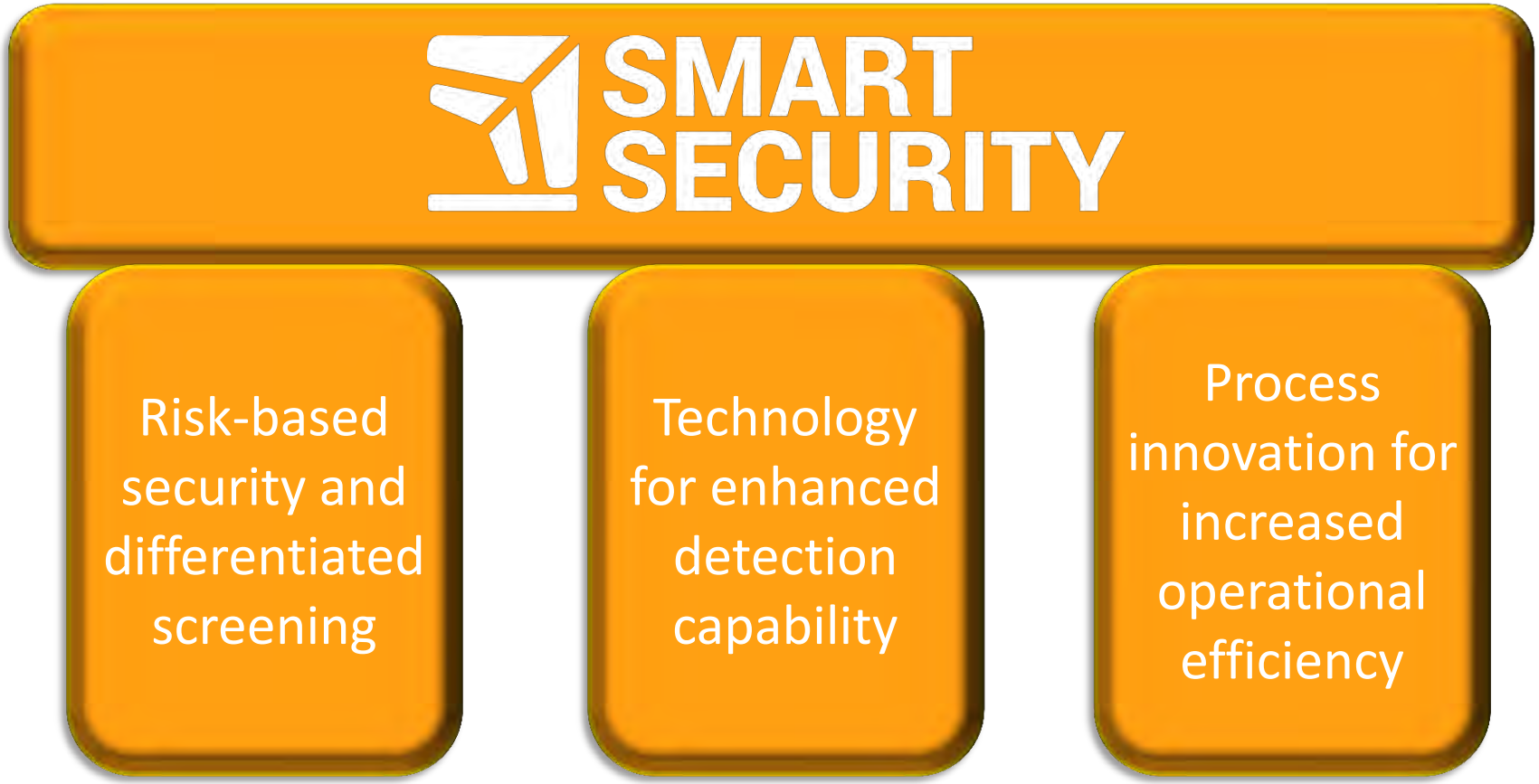


Who is involved?

- Smart Security Management Group
  - Defines policy, technical and operational requirements, develops positions and drives the program of work
  - 15 members representing industry and government

- Smart Security Working Group
  - Contributes to recommended practices, guidance material and other deliverables
  - Includes airlines, airports, governments, solution providers, consultants, academia

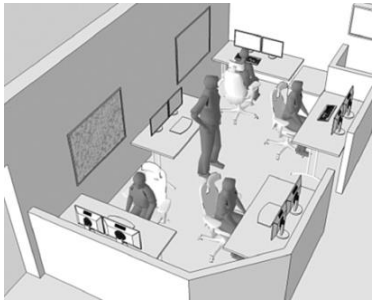
The three pillars of the solution



Testing and evaluating the concept

- In 2012, component testing and evaluation kicked off with trials in GVA, LHR and AMS

- In 2013, component testing and evaluation shifted into higher gear as we continued to evaluate the Smart Security 2014 blueprint with industry and government partners



GENEVE AÉROPORT

Heathrow
Making every journey better

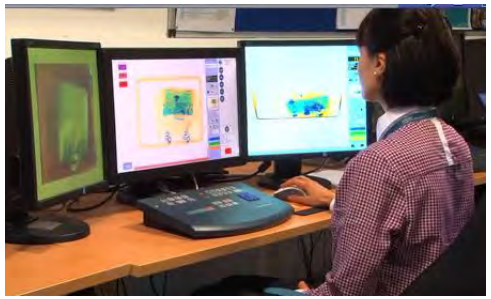
Schiphol
Amsterdam Airport

YOUR LONDON AIRPORT Gatwick

Centralized Image Processing – LGW (2013)

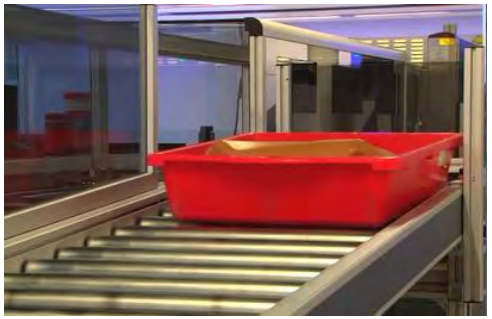
Purpose

To test and demonstrate the **operational efficiencies** that can be delivered through implementation of a **high throughput** CIP system



The Trial

X-rays from two lanes were networked, with images collected, queued and presented to officers stationed away from the lanes in a centralized image processing room



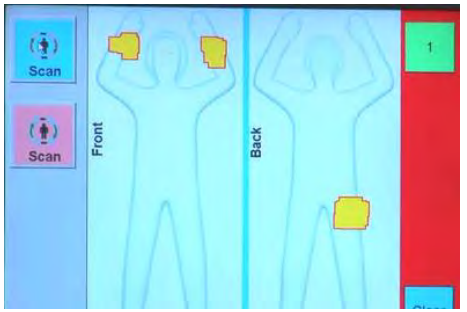
Results

- Over 600 trays processed per hour per lane
- Additional staff per lane required, but less lanes required across the concourse
- Further studies on resourcing to be undertaken
- Guide to developing a CIP room produced

Security Scanners – LGW (2013)

Purpose

Investigation into ways to **maximize the utilization and throughput** when implementing Security Scanners



The Trial

Deployed as a secondary measure to resolve alarms on the WTMD

Two resolution stations were used to allow parallel processing of passengers

Results

- 450-500 passengers per hour with WTMD/Security Scanner combination
- Received positive feedback from staff and passengers
- Maximized Security Scanner + Centralized Image Processing trial = overall high throughput screening point

Identity Management – GVA, LHR (2012)

Purpose

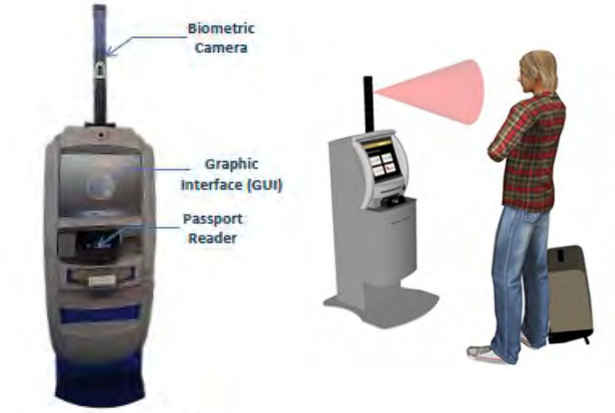
To investigate the **accuracy, reliability** and **speed** of using biometrics and e-passports in the ground process to **positively identify passengers** so that appropriate risk based security measures could be applied

The Trial

- Passengers authenticated their identity at a kiosk via a simple user interface
- They were then able to verify their identity at the checkpoint by simply looking at a biometric camera
- Tested the passenger process, technology performance and response from passengers

Results

- Accuracy: adequate level
- Speed: fast enough for operational use
- Passengers: found it easy to use

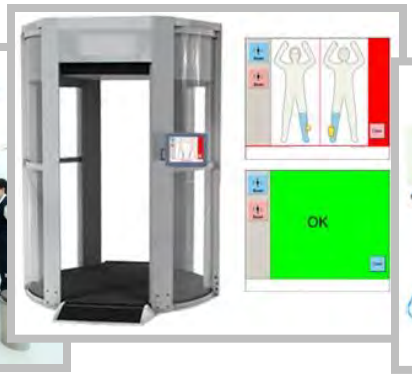


Identity Authentication Kiosk

Proof of concept pilots in 2014

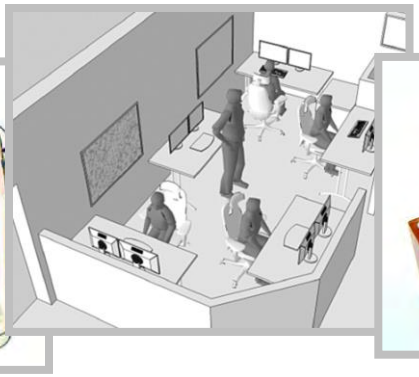
- In 2014, selected airports will deploy a proof-of-concept Smart Security checkpoint based on the 2014 solution footprint

lane configuration and automation



security scanners

large electrical items effectively screened while in bags



remote screening

unpredictable measures and steps towards risk-based differentiation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Airport Development
Reference Manual
Effective March 2014
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AIRPORTS COUNCIL INTERNATIONAL
Forecasting and Planning sections
produced in collaboration with ACI
10th Edition


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Airports + Aviation Group
Group aéroportuaires + Aviation
Grupo Aeropuertos + Aviación


CHA
design/construction solutions


h+k


AECOM


InterVISTAS
a company of Royal HaskoningDHV


ACC


PARSONS
BRINCKERHOFF

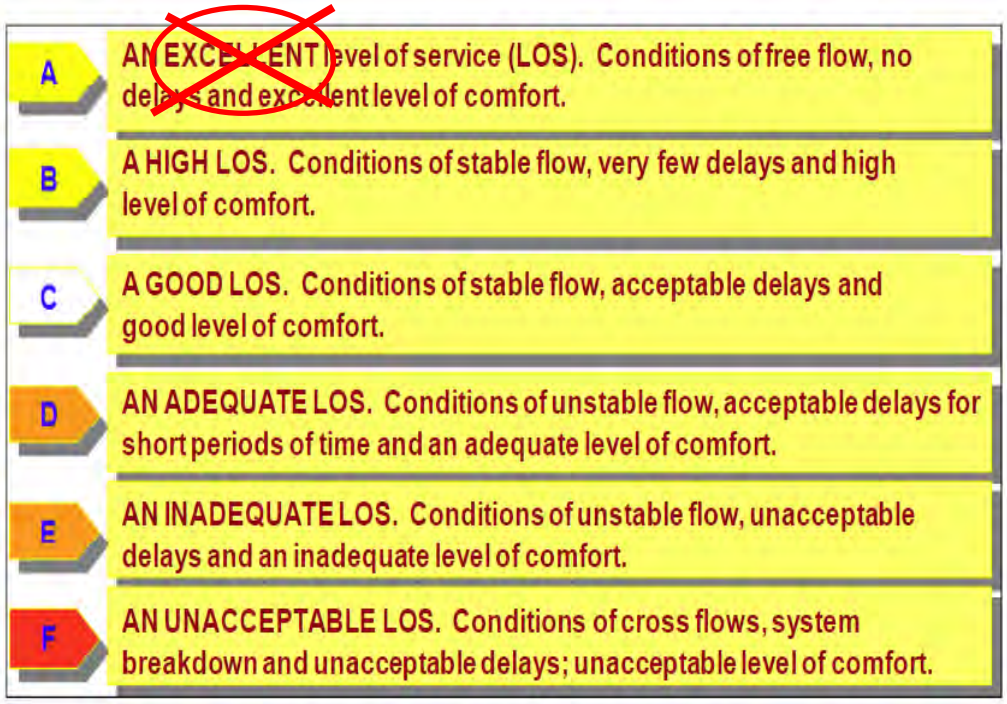
Airport Service Quality

www.aci.aero/Airport-Service-Quality

- ↗ Increasing need for recognized and reliable quality of service indicators
- ↗ Increased importance of passenger satisfaction level due to stronger competition between airports

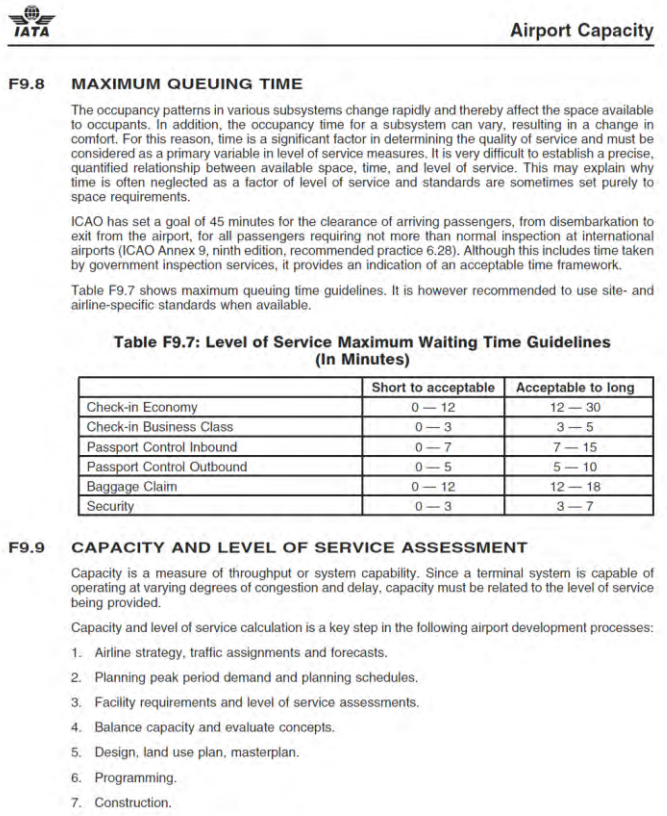
Previous ADRM LoS concept

- Based on alpha system (A,B,C, etc.)
- Misleading – implies “A” is better than “C”



Previous ADRM LoS concept

- Intent is that LoS should optimise the criteria of time (queuing, waiting, process, etc.) vs. space take (m^2)
- Optimal “best fit”.



IATA Airport Capacity

F9.8 MAXIMUM QUEUING TIME

The occupancy patterns in various subsystems change rapidly and thereby affect the space available to occupants. In addition, the occupancy time for a subsystem can vary, resulting in a change in comfort. For this reason, time is a significant factor in determining the quality of service and must be considered as a primary variable in level of service measures. It is very difficult to establish a precise, quantified relationship between available space, time, and level of service. This may explain why time is often neglected as a factor of level of service and standards are sometimes set purely to space requirements.

ICAO has set a goal of 45 minutes for the clearance of arriving passengers, from disembarkation to exit from the airport, for all passengers requiring not more than normal inspection at international airports (ICAO Annex 9, ninth edition, recommended practice 6.28). Although this includes time taken by government inspection services, it provides an indication of an acceptable time framework.

Table F9.7 shows maximum queuing time guidelines. It is however recommended to use site- and airline-specific standards when available.

Table F9.7: Level of Service Maximum Waiting Time Guidelines (In Minutes)

	Short to acceptable	Acceptable to long
Check-in Economy	0 — 12	12 — 30
Check-in Business Class	0 — 3	3 — 5
Passport Control Inbound	0 — 7	7 — 15
Passport Control Outbound	0 — 5	5 — 10
Baggage Claim	0 — 12	12 — 18
Security	0 — 3	3 — 7

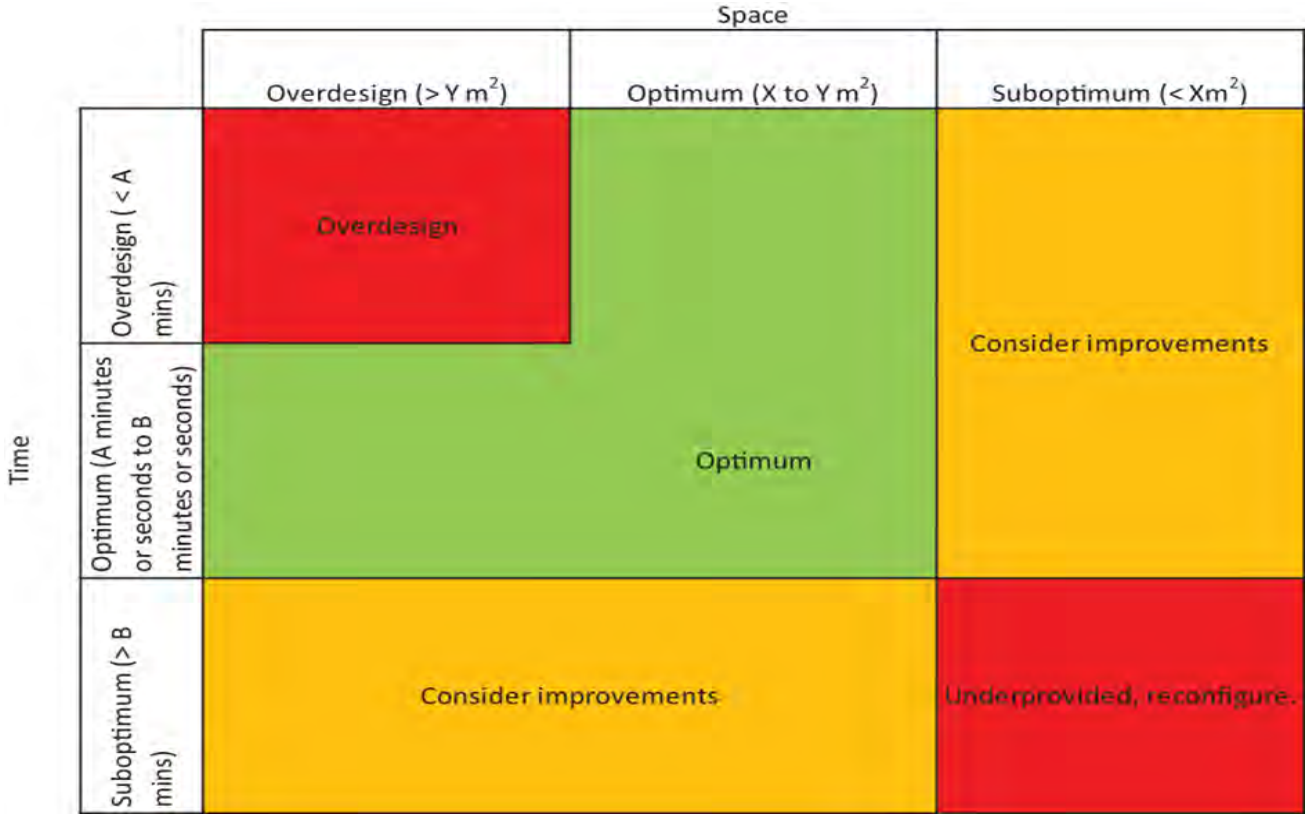
F9.9 CAPACITY AND LEVEL OF SERVICE ASSESSMENT

Capacity is a measure of throughput or system capability. Since a terminal system is capable of operating at varying degrees of congestion and delay, capacity must be related to the level of service being provided.

Capacity and level of service calculation is a key step in the following airport development processes:

1. Airline strategy, traffic assignments and forecasts.
2. Planning peak period demand and planning schedules.
3. Facility requirements and level of service assessments.
4. Balance capacity and evaluate concepts.
5. Design, land use plan, masterplan.
6. Programming.
7. Construction.

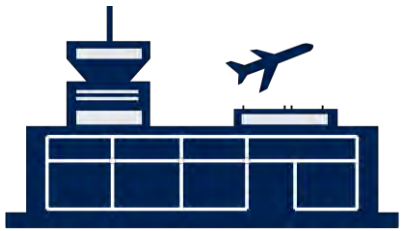
New Levels of Service (LoS) Concept



Passenger Terminal Processor		SPACE STANDARDS FOR WAITING AREAS (m^2/pax)			WAITING TIME STANDARDS FOR PROCESSING FACILITIES (Minutes)			WAITING TIME STANDARDS FOR PROCESSING FACILITIES (Minutes)			PROPORTION OF SEATED OCCUPANTS (%)		
					Economy Class			Business Class / First Class					
ADRM 9th Edition **ADRM 10th Edition**		A B Over design	C Optimum	D E Suboptimum	A B Over design	C Optimum	D E Suboptimum	A B Over design	C Optimum	D E Suboptimum	A B Over design	C Optimum	D E Suboptimum
Public Departure Hall		>2.3	2.3	<2.3									
Check-in	Self-Service Boarding Pass / Tagging	>1.8	1.3 - 1.8	<1.3	0	0-2	>2	0	0 - 2	> 3			
	Bag Drop Desk (queue width 1.4 - 1.6 m)	>1.8	1.3 - 1.8	<1.3	0	0-5	> 5	0	0-3	>3			
	Check-in Desk (queue width 1.4 - 1.6 m)	>1.8	1.3 - 1.8	<1.3	<10	10-20	>20	Business Class Check-in Desk < 3	3-5	> 5			
								First Class Check-in Desk 0	0-3	>3			
Security Checkpoint (queue width: 1.2 m)		>1.2	1.0 - 1.2	<1	<5	5-10	>10	Fast Track 0	0-3	>3			
Emigration (Passport Control) (queue width: 1.2 m)		>1.2	1.0 - 1.2	<1	<5	5-10	>10	Fast Track 0	0-3	>3			
Boarding Gate Lounge	Seating	>1.7	1.5 - 1.7	<1.5									
	Standing	>1.2	1.0 - 1.2	<1							>70%	50%-70% [1]	<50%
Immigration (Passport Control) (queue width: 1.2 m)		>1.2	1.0 - 1.2	<1	<10	10	>10	Fast Track <5	5	>5			
Transfers					<5	5	>5	0	0-3	>3			
Baggage Claim Area					First passenger to first bag			First passenger to first bag					
	Narrow Body	>1.7	1.5 - 1.7	<1.5	<0	0-15	>15	0	0-15	> 15			
	Wide Body	>1.7	1.5 - 1.7	<1.5	<0	0-25	>25						
Public Arrival Hall		>1.7	1.2 - 1.7	<1.2				*n.b. Priority bags to be delivered before Economy*			>20%	15%-20% [1]	<15%
CIP Lounges			4.0										

[1] The lower limit is only to be considered if extensive F+B seating is provided in the departure lounge, or, concession zone seating available

Benefits

Aircraft Operators	Airports	Government	Passengers
			
↗ Improved value proposition ↗ Shorter transit times ↗ Cost avoidance in take-off delays	↗ Improved passenger throughput ↗ Reduced queue length and times ↗ Economic benefits in retail revenue	↗ Maintain determined level of security ↗ Avoid security charges increase ↗ Reduced size of crowds to minimizes level of threat	↗ Reduced queuing times, less stress and hassle ↗ Increased discretionary time after security checkpoint

Questions & Answers