Schiphol Security Service
The new approach in Aviation Security

Ron Louwerse
Amsterdam Airport Schiphol
Director Safety, Security & Environment
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Preconditions Schiphol aviation security

Customer

Continuity

Costs  Compliance
Passenger & aviation security
Our ambition
Our approach

Passenger Experience Method

- Connecting interests of airlines, partners & airport
- Combining technical & human aspects
- Creating one overall passenger experience concept

Security as a Service
Translating service in every detail

Architecture

Communication

Staff

Process
Bird’s eye view
Boarding card reader
Assign target groups
Automatic tray dispenser & RFID chip
Parallel preparation
Code scan
Security Scan
Bagage diverter
Targeted bag search
Parallel reclaim & care-zone
Process & Smart Security

- Parallel preparation
- Remote x-ray
- Separate x-ray for rescreening
- Parallel reclaim
- Diverting baggage
- 2 resolution stations security scan
- Security scan
- Auto clear
- Code scan
- RFID chip
- Automatic tray dispenser

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Schiphol Airport
Process & Smart Security

Parallel preparation

Automatic tray dispenser

RFID chip

Code scan

Auto clear
Process & Smart Security

- **Waiting area**
  - Boarding card reader: passengers enter the right security area
  - Ability to assign target groups dynamically to lanes
- **Automatic tray dispenser**
  - Minimize passengers & agents actions
  - Only one type of bin
- **Parallel preparation**
  - Faster passenger doesn’t have to wait for slower passenger (passing by stimulated)
- **RFID chip**
  - A RFID chip in the tray combined with a picture of the tray enhances tracking & tracing of tray
- **Code scan**
  - Code scan of trays for special attention-bags or passengers
- **Auto clear**
  - Auto Clear software automatically clears images that do not contain a threat item, so x-ray screeners can focus on the more complex images.
Process & Smart Security

Remote x-ray

Separate x-ray for rescreening

Parallel reclaim

Diverting baggage

2 resolution stations security scan

Security scan

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Process & Smart Security

- Remote x-ray - Centralized Image Processing (CIP)
  - Enhances data capture capabilities; X-ray analyst can focus entirely on X-ray analysis and not also logistical tasks
  - Targeted bag search; RXA-operator marks on the screen regions to be searched and gives classification of threat
  - Efficient: continual review of lane-neutral images, eliminating down-time screeners when tied to a single lane and x-ray. Eliminating operational disturbances at lane due to change of shifts. When busy: adding an extra operator, instead of opening an extra lane

- Diverter
  - Separation of clear and non-clear cabin baggage
  - In case of any technical issues: bags diverted

- Security Scan
  - Security benefit: automatically detects concealed objects, moving beyond metal detection
  - Passenger experience: reduces need for intrusive pat-downs & use of generic figures for image resolution
  - Security and operational benefits can be gained from random and rule based switching of equipment sensitivity and algorithms used on the Security Scanner

- Two resolutions stations
  - Enhances flow

- Separate x-ray for re-screening
  - Only downstream processes, no reversed flow

- Parallel reclaim & care zone
  - Faster passenger doesn’t have to wait for slower passenger
  - Passengers have special care-zone out of process
2014 – 2015

Customer Centered 2014 - 2015
• Feeling save, secure and respect:
• LAG solution
• Less divesting
• Passenger independent of others
• Logical next steps in process
• Differentiation

Compliance 2014 - 2015
• Passenger screening: Security Scanner Provision 2 & Resolution stations
• Cabin baggage screening:
  • Common X-ray;
  • Rescreen capability;
  • Type C+ solution in rescreen X-ray;
  • Type B for alarm resolution;
  • Remote X-ray analysis
• Security lane: separation of clear and non-clear cabin baggage; in case of any technical issues: bags diverted

Cost Competitive 2014 – 2015
• All lanes identical & able to handle special attention groups
• Just downstream process
• At least one lane for odd-size at each checkpoint
• Each step in lane has ability to process passengers parallel
• Only proven technology
• Security agent can configure security level on passenger level more strict based on appearance & behavior
• Target groups assigned dynamically to lanes
• One type of bin and also roller case on belt
• Agent has overview
• The technical design prevents out of gauge baggage
• Minimum number of operations by security agents
Continuity calls for business agility

2014 / 2015: we know what to prepare for
2016 and further: we don’t know what to prepare for

How to guarantee continuity?

Ability to adapt security solutions rapidly & cost efficiently in response to changes in business environment

We created two key business agility design principles to create a future proof checkpoint and match future challenges:

- Configurable security measures
- Configurable capacity of every component
Configurable security measures
Smart Security / SURE!
- Unpredictability: continually random changing security measures; random factor can be altered on the spot
- Robust: security system can be adjusted to future threats
- Flexible: immediately adjustable to actual threat
- Reasoned: measures changeable based on destination or behavior
- Differentiate: system is able to give every passenger tailored security measures

Passenger & Cabin baggage screening
- Easy changeable settings (high or low algorithms if needed)
- Real time switching settings (100-0%; 75-25%; 50-50% etc)
- Security scanner future proof (detects anomalies not metals)
- Cabin bag screening makes use of EDS (imminent threat)

Configurable capacity of each component enables scalability of each (sub)process
Preparation
- 3 large or 4 medium preparation positions & roller case on the belt or in a tray
- Ability to change dimensions of tray (depending on pax characteristics or season): Full size tray (large) or half size tray (medium)

X-ray analysis
- Number of remote X-ray viewers per security filter / lane & decision time X-ray analysis

Security Scanner
- Number of resolution stations (supports parallel visitation) & number of agents for (parallel) passenger visitation

Reclaim
- Reclaim length / positions & remote reclaim length / positions
- Scalability between reclaim positions / visitation positions

Cabin baggage search
- Number of: cabin baggage search positions, security agents per cabin baggage search area dual lane, rescreen X-rays (1 or 2)
- Type of rescreen X-rays (standard / odd-size)
Results
Results

@Schiphol the new security control area at terminal 1 is great - good looking, fast process and very innovative - well done!!

@Schiphol Net weer door nieuwe security geweest, is prachtig, hulde! Als @Privium lid voel ik me ook niet meer in een hoekje gedrukt.

Op weg naar Nice. Nieuwe security Check is mooi & efficient. #Schiphol.
Quality Improvement Schiphol Security Service

Overall: +28% more positive

- Faster: 52
- Better check, safer: 24
- Efficient, smooth: 11
- Architecture: 12
- Friendly staff: 14
- Overview: 15
- Other: 5

Quality Improvement Schiphol Security Service
Future Travel Experience - Awards 2014

Best Airport Security Initiative: Amsterdam Airport Schiphol
INVITATION

Amsterdam Airport Schiphol
January 14th or 15th 2015

SCHIPHOL SECURITY SERVICE EXPERIENCE

choose your preferred date and register by e-mail:

smartsecurity@iata.org

more information: IATA – Smart Security