

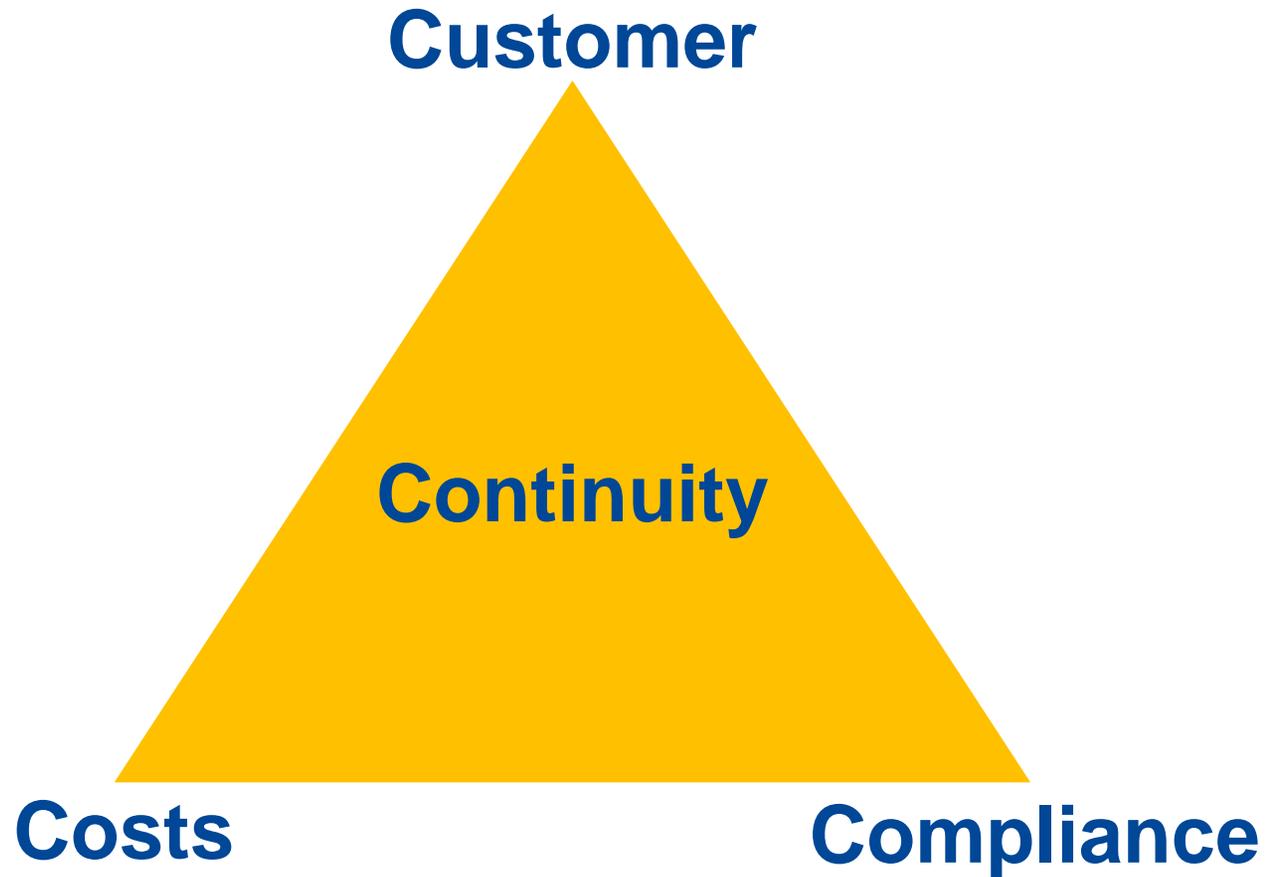
Schiphol Security Service

The new approach in Aviation Security

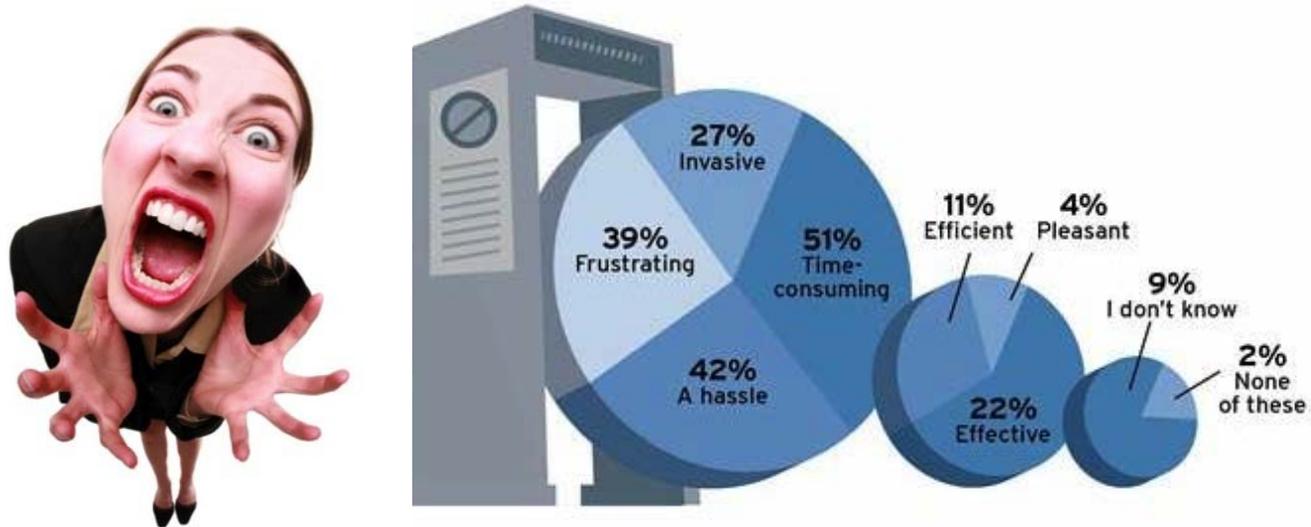
Ron Louwense
Amsterdam Airport Schiphol
Director Safety, Security & Environment
October 2014



Preconditions Schiphol aviation security



Passenger & aviation security



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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

THE NEW
APPROACH



Boarding card reader



Assign target groups



Automatic tray dispenser & RFID chip



Parallel preparation



Code scan



Security Scan



Bagage diverter



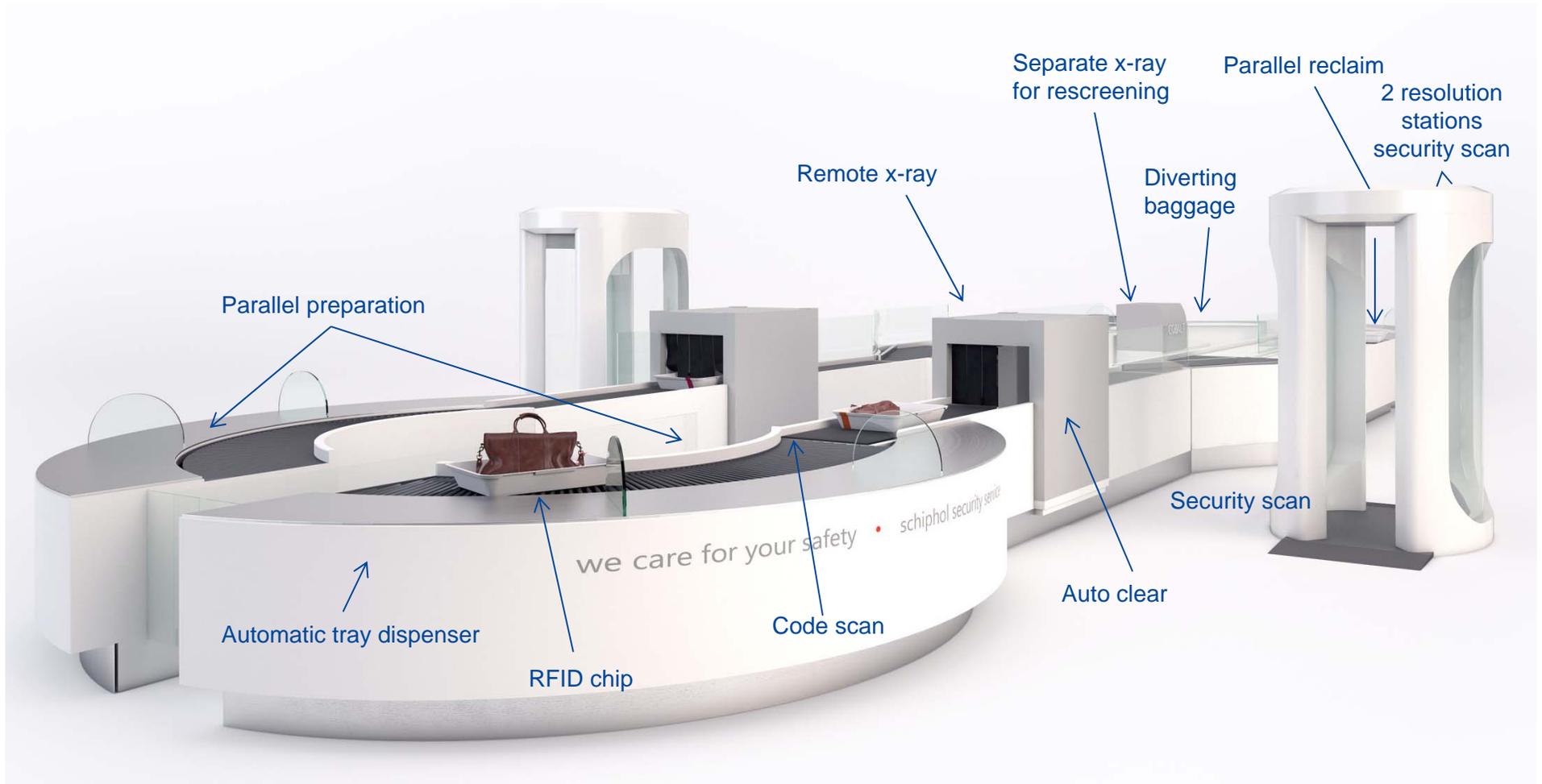
Targeted bag search



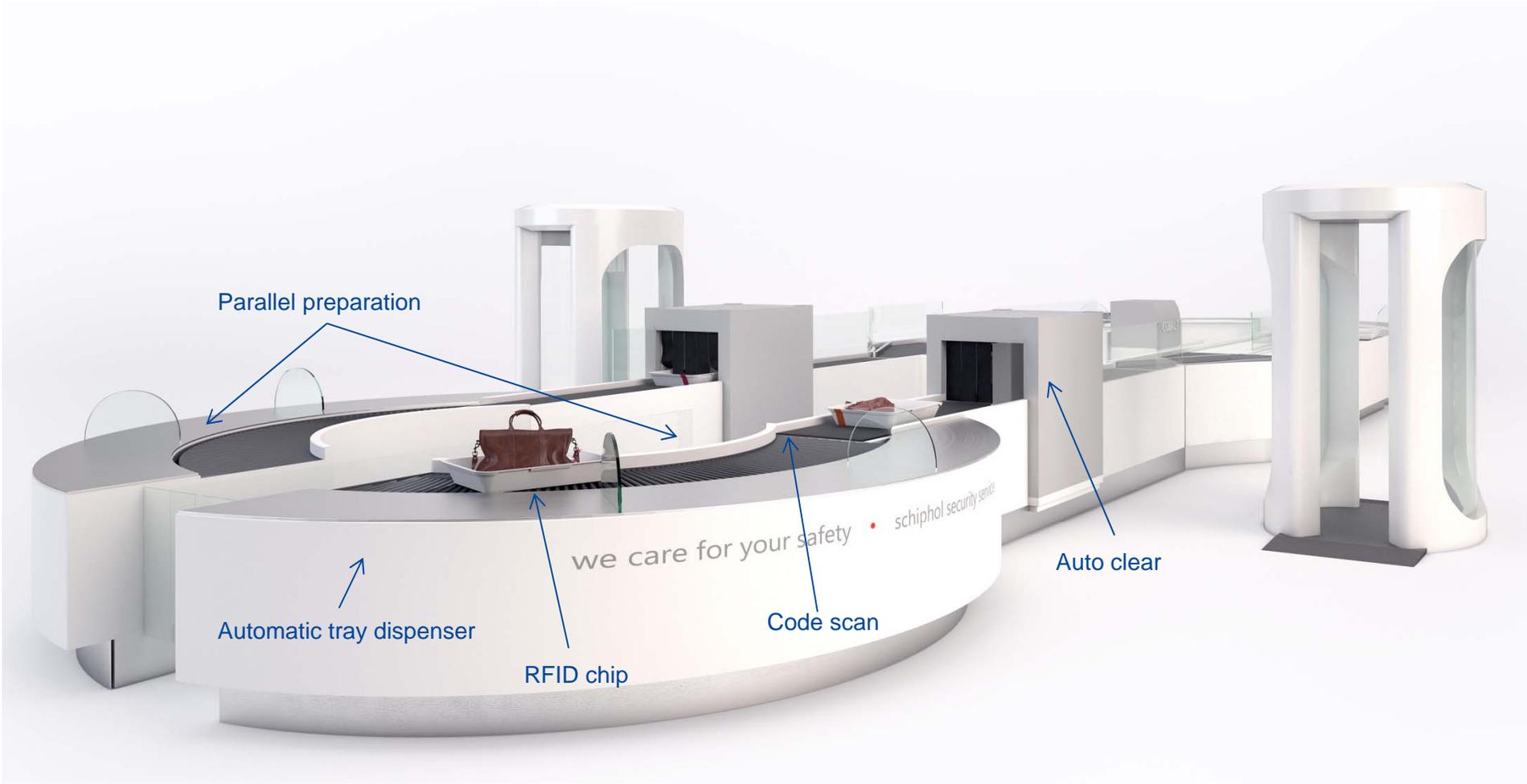
Parallel reclaim & care-zone



Process & Smart Security



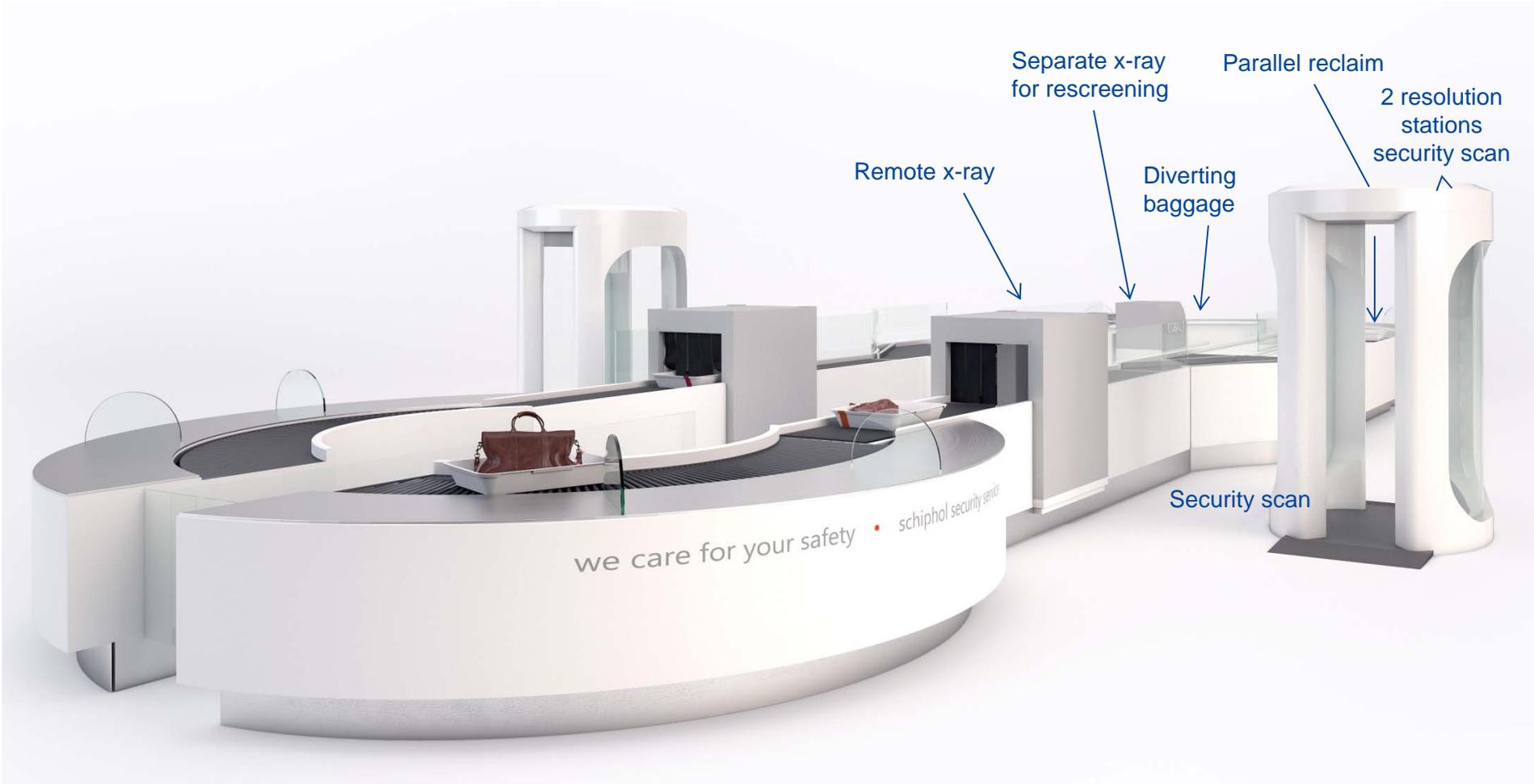
Process & Smart Security



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



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 of 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

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@hartmutwagner Follow

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

Reply Retweet Favorite More

9:02 AM - 8 Jul 2014

 **Remi Ramcharan**
@RemiRamcharan Follow

New x-ray at #Schiphol. Nice (@ Security / X-Ray) foursquare.com/remiramcharan/...
pic.twitter.com/BdiQLk5FwU

Haarlemmermeer, North Holland

Reply Retweet Favorite More

 **Frank Rebers**
@FrankRebers Follow

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

Reply Retweet Favorite More

11:25 PM - 24 Jun 2014



 **Bas Burchartz**
@Burchartz Follow

Nieuwe security setup eu vluchten @Schiphol supersmooth! Ongelofelijk gewoon!

Reply Retweet Favorite More

7:54 PM - 23 May 2014

 **Ralph Mul**
@RalphMul Follow

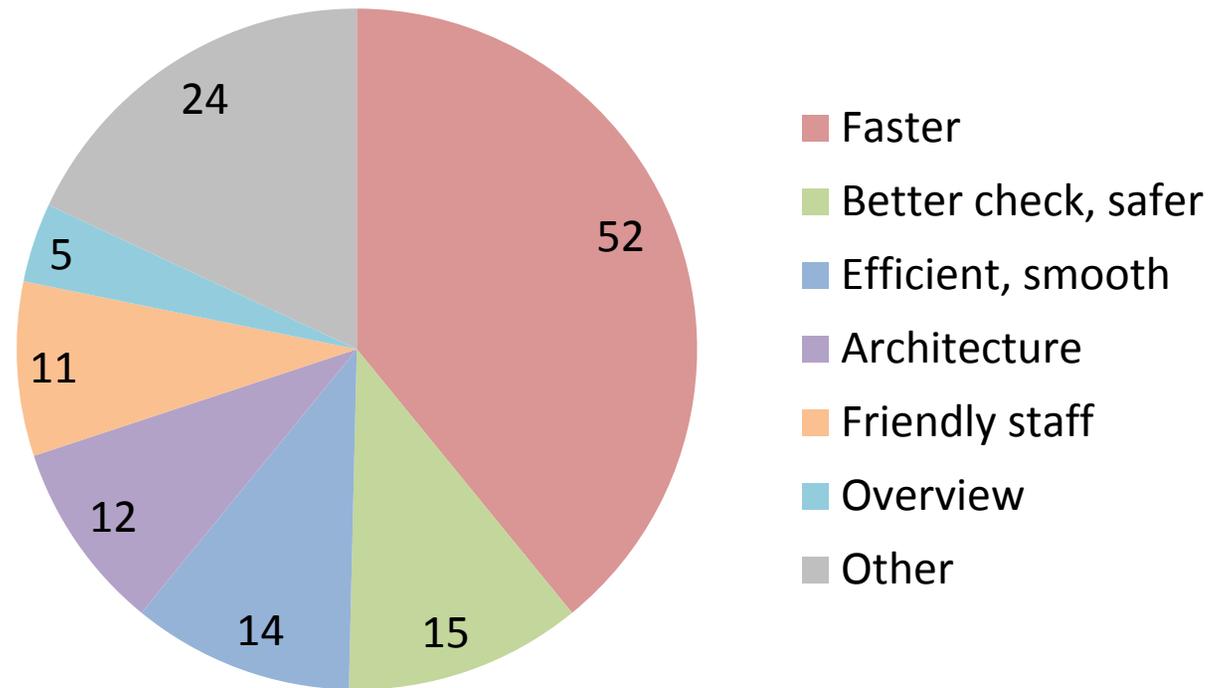
Op weg naar Nice. Nieuwe security Check is mooi & efficiënt. #Schiphol.

Reply Retweet Favorite More

4:35 AM - 1 Jul 2014

Quality Improvement Schiphol Security Service

Overall: +28% more positive



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