

## Welcome!

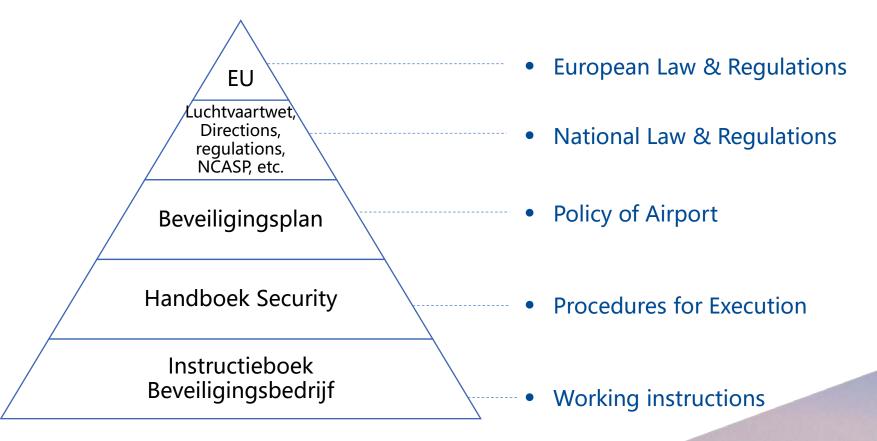
**Aviation Security** 

Schiphol Security

**EDS CB & TSA EA** 

Aviation Security in the Netherlands

## Laws & Regulations



#### Responsibilities

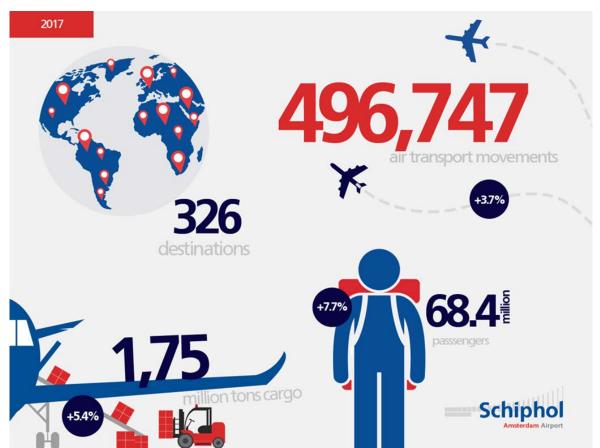
- Responsibility lies with Minister of Justice & Security
  - Setting norms for security level at Dutch airports
- Royal Police (KMar)
  - Supervision of compliancy ('Handhaving en Toezicht')
  - Police tasks
- Airport Schiphol (Safety, Security & Environment)
  - o Responsible for security execution, also <u>additional measures for airlines!</u>
  - Supervision of security companies

#### Security Companies

- o **G4S**
- o I-Sec
- Securitas
- o SDBV
- o **P.I.**

Security at Amsterdam Airport Schiphol

## Facts & Figures Schiphol Group - 2017



## **Security Department**

#### **Security Operations:**

- Scope: operational / tactical
- 24hour direction of security operation
- Management of security companies
- Security Control Centre
- Badge Centre

#### **Security Policy:**

- Scope: strategic
- Policy making
- Process development and optimizations
- Contract management
- Capacity management
- R&D

#### **Security Quality & Compliance:**

- Independent check on quality
- Mystery guests
- Complaints

### Responsibilities of the airport

#### The Airport operator is responsible for:

Ch 1: Airport

Ch 2: Designated zones incl. staff screening

Ch 3: Aircraft security

Ch 4: Passengers and hand baggage

Ch 5: Hold baggage

Ch 6: Cargo and mail

Ch 7: Company mail and materials of airlines

Ch 8: Inflight supplies

Ch 9: Airport supplies

Ch 10: In-flight security

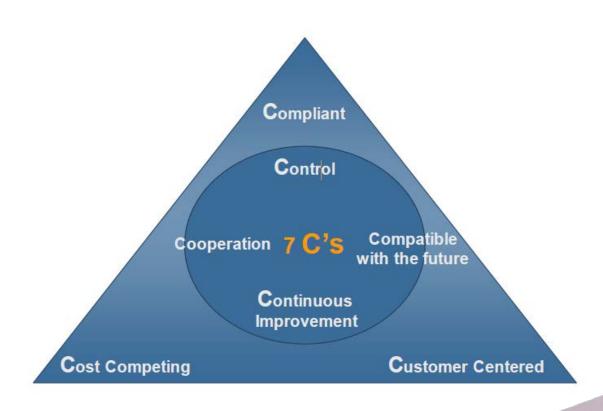
Ch 11: Recruitment & training

Ch 12: Equipment

#### Additional National Regulations:

On national level further detailed in the NCASP (Aviation law, orders, etc.), e.g. High Risk Flight additional measures

## Main focus: Compliancy, Customer & Costs



## **Division of Security lots**

#### Lot 1 (I-SEC)

- Passenger and hand baggage check departure filter 1 & 2
- Staff check in departure filter Crew Centre
- Specials

#### Lot 2 (G4S)

- Passenger and hand baggage check departure filter 3 & 4
- Passenger and hand baggage check transfer filter 1 & 2

Lot 3 (G4S): Hold baggage screening

Lot 4 (I-SEC): Staff and goods check Schiphol centrum

**Lot 5 (I-SEC):** Staff and goods check periphery and check cargo area's

Lot 6 (Securitas): Surveillance in SRA

Lot 7 (SDBV): Surveillance in public area

Lot 8 (P.I.): High Risk Flight security











## **Departure and transfer filters**

**Security scan** 



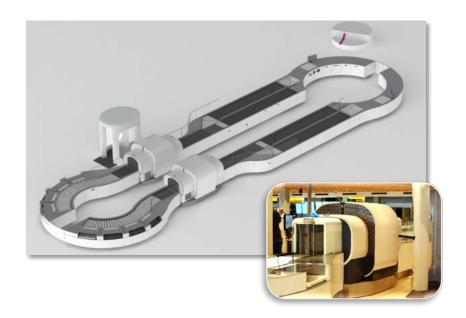
**Logistics** 



**Remote screening** 



#### **Innovation in filters**











## Translated in every detail









Innovation

# EDS CB

## **Schiphol**

## **EDS CB:**

CT-system for Cabin Bags

- Background
- Implementation
  - Why?
  - Opportunities
  - Dutch legislative options
  - What?
  - Trials
  - Where?
  - Planning
- First results

## **Background EDS CB at Schiphol**

- Start of research and development since 2012
  - Challenge to introduce technique in smaller format
  - Challenge to make use of technology with moving objects
    - Less time to create image, but quality must be high
    - Many different shapes and forms of objects
- Start of 3D trials in 2015
- Schiphol is frontrunner with 3D-technology for Cabin Bags and internationally acknowledged as test bed
  - Multiple types of machines (suppliers) are tested at Schiphol

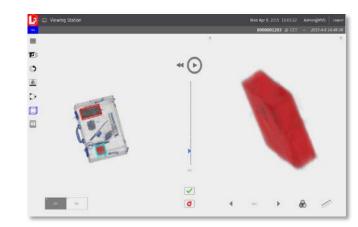
#### Implementation | | Why?

#### **Necessity**

Directive from Dutch Ministry of Justice & Safety (NCTV)

#### **Opportunity**

- Futureproof system algorithm adaptable to new threats
- C3 Conops Laptops and LAG can stay in bag
- Our present X-ray systems are outdated



- ✓ Higher efficiency at checkpoint more passengers per minute
- ✓ Increase of passenger satisfaction less divesting by passenger

#### Implementation | | Opportunities



FUTURE PROOF If threats change adjust only settings or software

Future legislation (e.g. LAG's) & threats

THROUGHPUT/ COSTS Create step change for divesting/reclaim

Higher throughput & savings OPEX

Number of passengers per agent

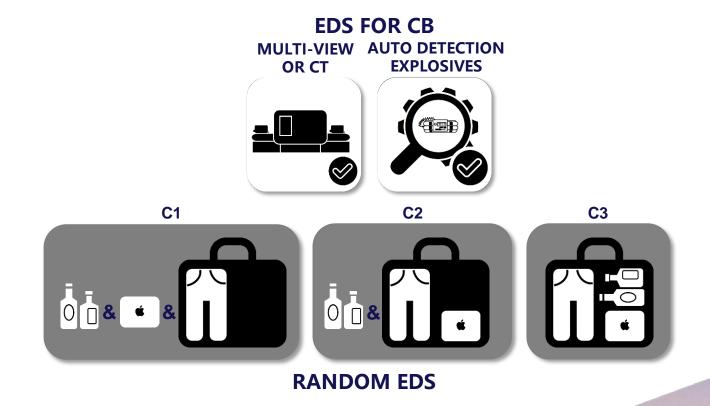
CUSTOMER EXPERIENCE
Laptops & LAG's
in bag
Less divestiture
& reclaim

Faster passenger process

SAFER
AIRPORT
Automated detection
highest threats
in cabin baggage

Automated detection other threats; fire arms & guns?

#### Netherland's legislative options



#### Implementation | | What?

- International testbed for CT
- 4 Suppliers
- 3 installed at Schiphol (Transfer checkpoint E-F)
- We have chosen L3 Communications because of C3.



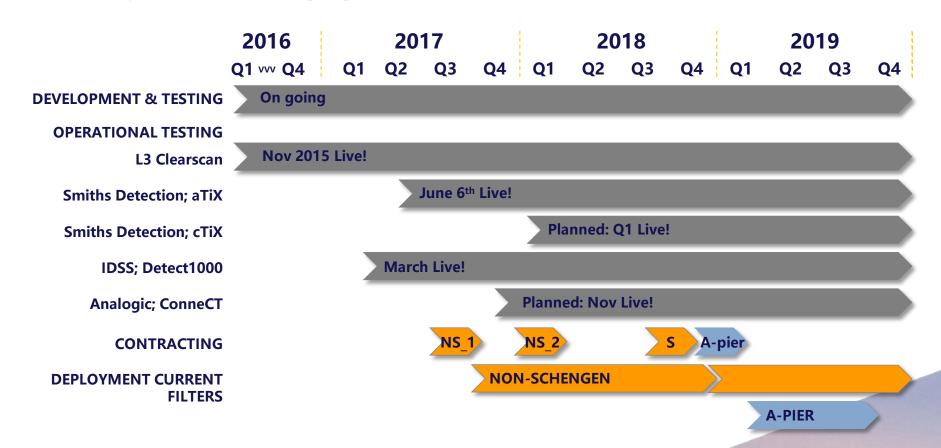
#### **Trials**

- Trial and create EDS solution for Dutch Aviation Security (NCTV – Schiphol – KLM)
  - 1. Test different equipment
  - 2. Test and develop different CONOPS/ Algos C1-C3, C4
  - 3. Create e.g.:
    - 1. Lower FAR; supply manufacturers image set for machine learning
    - 2. Better Image quality/capabilities
      - 1. Find threat objects more easily
      - 2. Bring down decision time
    - 3. 3D training capabilities
    - 4. Open standards like DICOS
    - 5. Further automation
- 2. Purchase best EDS solution
- 3. Deploy solution for Amsterdam Airport Schiphol

#### Implementation | Where

- Every airport in the Netherlands (also RTH, Eindhoven, Lelystad, Groningen)
- Speed of implementation depends on size of airport
- Two phases at Schiphol:
- 1. 2018: Non-Schengen (international) checkpoints Departure 2 & 3
  - Transfer E-F & G-H
  - VIP
- 2. 2019: Schengen checkpoints
  - Departure 1 & 4

#### Planning | | Trials & Deployment



Status
01 July 2018

# First results

**Schiphol** 



# EDS for Cabin Baggage Deployment update

Monitoring performance & Risk Management

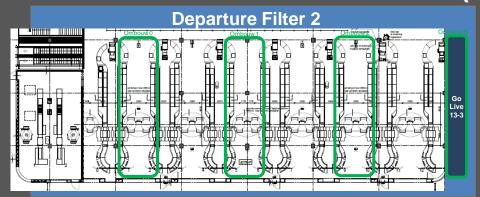
**01.JUNE 2018**VERSION: 0.8.0

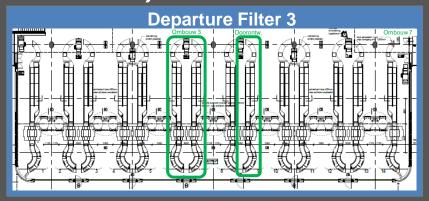


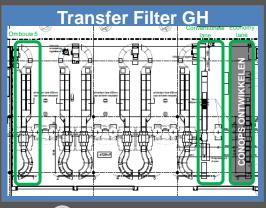


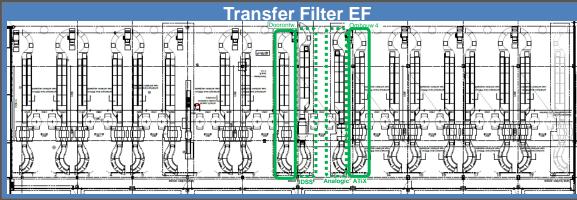


#### 5. PROGRESS DEPLOYMENT (status 12-05)

















#### PROGRESS DEPLOYMENT (concept)

Critical Peak Operations 2018	VF2	VF3	EF	GH	Total
Spring holiday (14.02-26.02)	6	3	4	1	14
May holiday (16.04-07.05)	7	6	5	2	20
Summer holiday (05.07-31.08)	7	7	14	4	32
Fall holiday (11.10-22.10)	9	10	18	5	42
Christmas holiday (20.12-02.01)	13	14	19	6	52



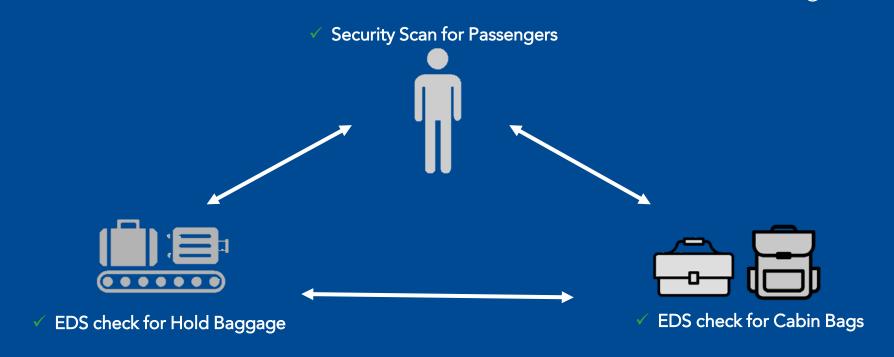




## TSA Emergency Amendment

Schiphol

#### Summary of Alternative Procedure KLM a.o.









# Holistic approach for High Risk Flights (HRF)

- Approval from TSA for AP EA for <u>location Schiphol</u>.
- High level screening equipment instead of extra measures at gate.
- Deletement of HRF procedures as of January 2019.
- No extra security costs for HRF flights for all airlines.

