THALES

Current and *Future* Challenge for Border Control

PSCE (Athens, Greece) – November 24Th 2016

OPEN

Current Context

Increasing flow of travelers

> Travelers on the rise globally

> Portion in Europe

Migrant Crisis

> Unforeseen flow

> Impact on Border control policies

> Screening of population needed

Security: Critical momentum

> Terrorist attacks

> New type of threats

Biometrics on Smartphones

> Fingerprint / iris

> Apple / Samsung / MasterCard / …

**| Efficient flow @ entry/Exit points | Increase level of security |
| Understand new type of citizen usage of technology |**

OPEN

THALES

Innovations to adress current and future market challenges

More security through use of biometrics

- Secure identification
- Fusion of the biometric data
- Respect Privacy

Data Digitalization

- Accompany technologic transition
- Connected citizen
- Physical Vs Digital

Efficiency at Border Control

- Intelligence & Cooperation
- Automated Border Control
- Biometrics

Before Traveling

DOCUMENT ISSUANCE AND PRE-RISK ANALYSIS

OPEN

BioNET: Schengen VISA applications for France

Customer Challenge

> **Acquisition** & **transmission** of **Schengen Visa** applicants data from 30 countries

> Provide a "**trusted**" solution (quality/security) to be operate by third parts

THALES Answer

> More than 350 Biometric enrolment stations (Hardware & Software)

> Secured data transfer to Ministry central site through internet

> Thales IDentity Management System for central server workflow & AFIS

> Users management system with certificates and PKI

> BioNET central server administration and supervision

Customer Benefits

> Highly efficient front-end solution (handling 15,000 request per day)

> Focus on best fingerprint captures with low rejection rate

> Biometric Matching System of the EU VIS

> Safeguarding the privacy by the use of "weak link" technology preventing unauthorized access to biometric data

OPEN

BioNet: Deployed systems
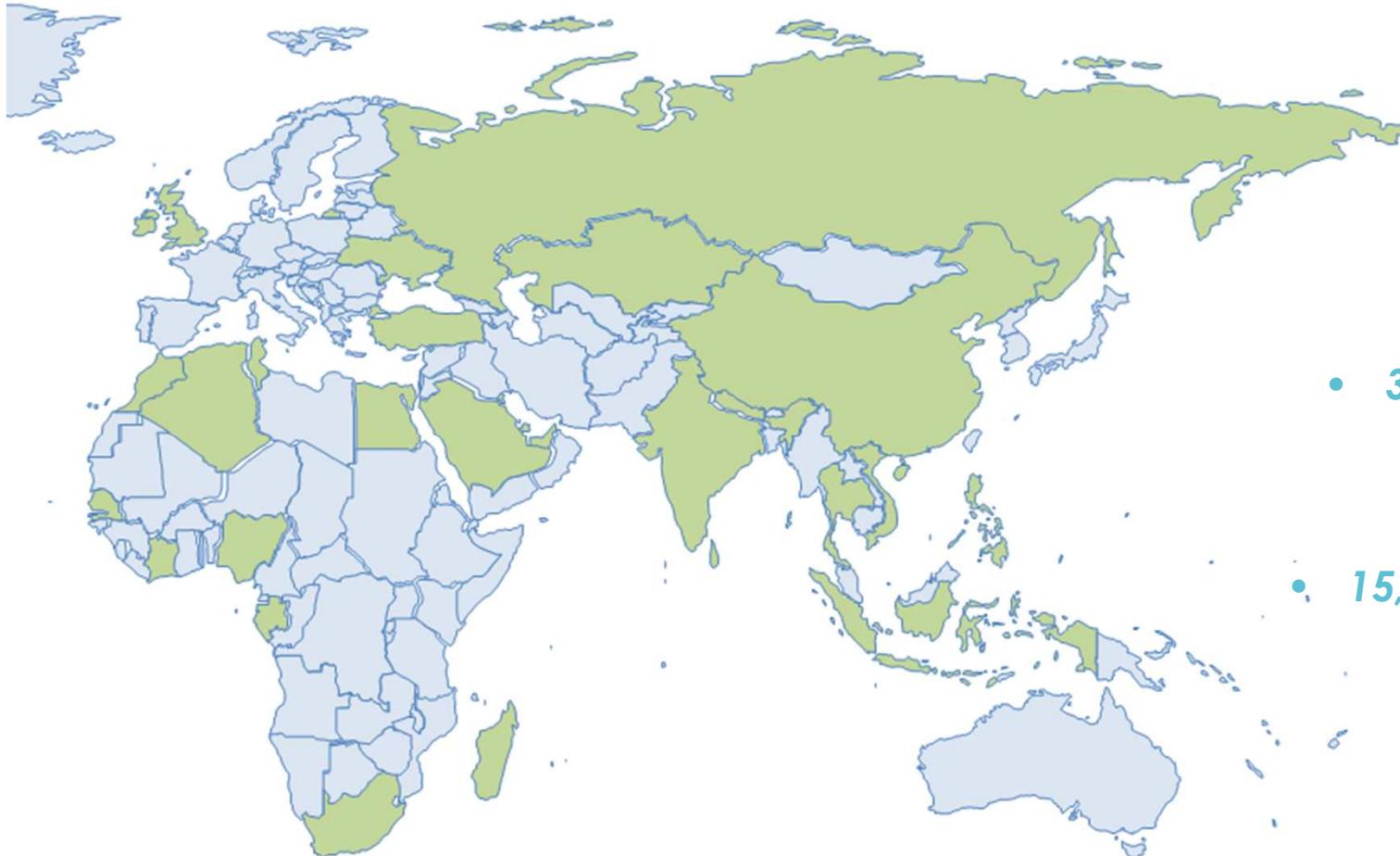
- *3 Service partners*

- *365 stations deployed*

- *25 countries*

- *15,000 requests per day*

OPEN

THALES

Document Security: BioQR

Objectives:

> Increase the **level of security** of the documents by integrating **biometrics** information

> **Cost effective** solution for large deployment

QR code: main advantages

> Generated in **high density** and allowing the information **encoding** (including Biometrics)

> **Rapid decoding** of the stored content using a **standard camera** (i.e.: smartphone camera)

> Advanced **cryptography** mechanism: the stored **data are highly secured**

> **Biographic** and **biometrics** data of the citizen **are controllable** (picture and fingerprint for instance)

OPEN

Data analytics: Support challenges faced by BC

Agencies are facing a complex environment

> High increase of the number of travelers worldwide

> Governmental budget under pressure

> New level of threats that are difficult to detect

Create value from the rich data available

> Passenger Name Record
- Name, gender, passport details, date and place of birth, payment/billing information

> Immigration and VISAS systems

> International Watch-Lists

> National ID systems

> Criminal Databases

> And many other
- Advanced Passenger Information System
- Social Networks

OPEN

THALES

Big Data Analytics - Overview
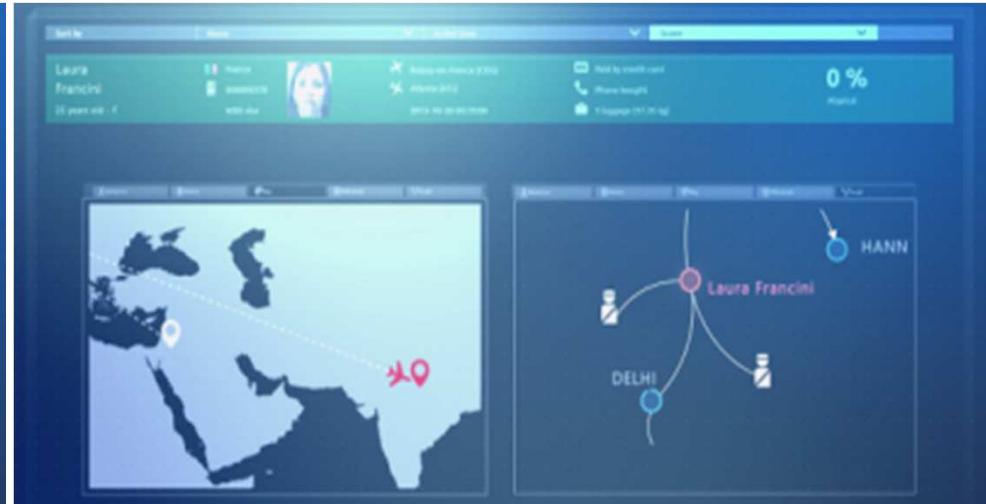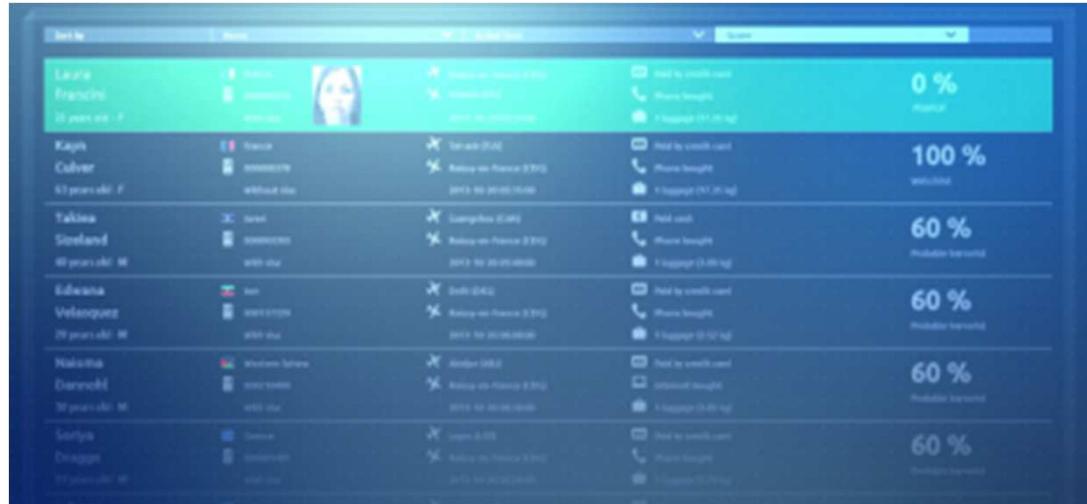
A innovative display of complex and large data sets

Configuration of rules

Patented algorithm for automatic detection of atypical profiles

Identity atypical profiles that are difficult to find using traditional methods

OPEN

THALES

At the Border

FRONT LINE EQUIPMENTS FOR ENROLMENT AND
CONTROL USING BIOMETRICS

OPEN

22

Equipments for Citizen/traveler control

Comprehensive suite of control equipment

| Fixed | Mobile | eGates | Kiosk | Smartphone |

Provide a mobile control capability for Border control or other Governmental agencies

> Control of the document and of the holder using biometrics

User friendly solution

> Ergonomic HMI for the operator and process oriented

> Screen for the candidate

> Fast in processing

Secured communications and data transfer

Connection to national and/or International databases and wtachlists

OPEN

11

THALES

Automatic Border Crossing: eGates

Main Feature

> Modular design

> multi-biometry verification

> Solution compliant with ICAO standards

- Capture and verification

> Tail-gating detection

> NFC integration

Optimized passenger experience

> Fast process

> Autonomous solution

> Feedback screen for the passenger for indication

OPEN

THALES

Lyon International Airport (France)

Customer Challenge

> Comply with the new policy conducted by French authorities

> Face constant increasing number of passengers

> Reduce the time of controls on travelers

Thales solution

> 5 eGates for Automatic Border crossing

- "Two steps" process with e-passport check and fingerprint verification
- Accurate biometric checks with single fingerprint scanner

(including anti-spoofing technology and full compatibility with BioApi 2.0 standard)

- Optimized design (footprint, ergonomy, safety and security of traveler)

Benefits

> Improved Passenger Experience

> High performing biometric matching accuracy

> System is PARAFE compliant (French eGate norm)
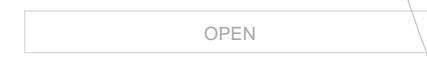
OPEN

Automatic Border Crossing: Kiosk

STEP 1 — **Passenger & Document Authentication**

Self Biometric Clearance Kiosk

Touch Screen
- User guidance

Full page passport reader
- Biographic data
- Passport & ePassport reading, authentication and control

THALES

Face and Iris Sensor
- Facial comparison with photo included in the passport to authenticate holder
- Iris capture of the traveler to be used later at the immigration

Boarding Pass issuance
- Biometric boarding pass issuance including a high definition QR code integrating captured biometrics and biographic information

Fingerprint Sensor
- Capturing and controling up to 10 fingerprints

BENEFITS

- Perform all security controls and authentication at step 1 and before step 2
- Control more passenger with limited human resources
- Improve passenger journey
- Increase population eligible for such eGates programs
- Secure storage and exchange of biometric data

OPEN

THALES

Uzbekistan: Passport Ugrade and Border Control

Customer Challenge

> Upgrade Passport to ICAO compliant ePassport

> Register full population biometrics

> Improve Ministries exchange of citizen information

> Improve Border control for national & foreigners

THALES Answer

> Biometric enrolment stations (Hardware & Software) to register 18 millions citizens

> Identity Management system (Thales' AFIS and Workflow management) to manage 18 millions records between 3 states organizations

> Check 20.000 biometrics per day

> Equip 70 border entry points and interface with border agency

Customer Benefits

> Capacity to register and build a reliable and performing biometric base of the population

> Complete Entry/Exit System enabling the Government to have a comprehensive view on its Border control

OPEN

Border Control Solutions Mapping: All stakeholders

Citizen / Traveller Oriented

Operator Oriented

Before Travel

Passport & Visa Issuance

Pre Risk Assessment
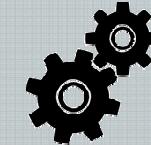
Data Analytics

Land / air / Sea

ABIS

National/ International databases & watch lists

Border Crossing

Land / air / Sea

Points of Control
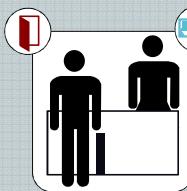
Entry Exit System
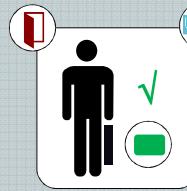
Manual   Mobile   Kiosk   eGate
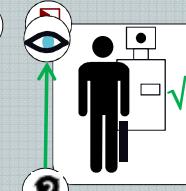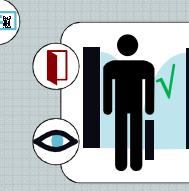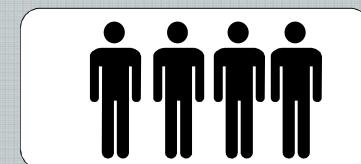
Land / air / Sea

OPEN

THALES

16

End Of Presentation

THANK YOU | QUESTIONS?

OPEN