



Benefits of Biometrics for Border Control

“Your biometric data are your identity”

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CASCETTA Alexandre
Solution Sales Director, Border & Travel,
Gemalto



Gemalto: world leader in digital security

Government:
Identity & Biometric
Solutions

Enterprise & Cybersecurity

Banking & Payment

Software Monetization

Mobile & Internet of Things
(IoT)

+2bn

END USERS
BENEFIT FROM
OUR SOLUTIONS

€3 bn

2018 REVENUE

16,000+

EMPLOYEES

120

NATIONALITIES OF
OUR EMPLOYEES

180+

COUNTRIES WHERE
OUR CLIENTS ARE
BASED

3,000

R&D ENGINEERS

100

NEW PATENTS
FILED IN 2016

WE'RE UNIQUE. WE'RE GLOBAL. WE'RE INNOVATIVE

What are the drivers for using Biometrics at Border ?

PASSENGER FACILITATION:

Air Travelers rising from 3,8 to 7,2 Billion

*Source: IATA – Period: 2016 and 2035
Passenger demand to double over 20 years*

1BIL EPASSPORTS ON THE FIELD

From 500 Mil in 2013 to 1Bil in 2017:
57% of total are ePassports

*Large ePassport footprint for wide scale usage
of systematic, automated controls*

COUNTRY SECURITY:

Detection of ID Fraud or wanted persons

*Interpol reports **68 Mil Stolen or Lost Passports**
that can be used to enter a country under a false
identity*

PROCESS OPTIMIZATION:

Self-service & process automation

*Automation is the first response to increasing
traveler flows, limited space & limited manpower*

DIGITAL PROOF OF IDENTITY:

Biometric Recognition Technology

*Biometric recognition offers precise and fast
identification at the airports*

MOBILE SUPREMACY:

Airline & Airport mobile applications

*Check-in is moving out of the Terminal.
Mobile check-in is on the rise*

Why Biometric identification enhance Borders Control ?

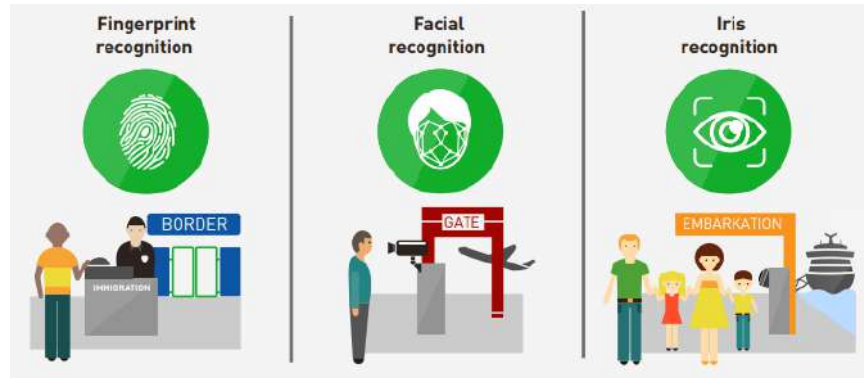
✘ Improve traveler verification & clearance

✘ Enhance Security:

- ✘ before the border: eVisa, ETA, consular, pre-screening, PNR ...
- ✘ at border: biometric enrolment / verification / identification
- ✘ inside the country: interoperability, control checks, mobility

✘ Fraud: protect against identity theft and detection of Visa fraud

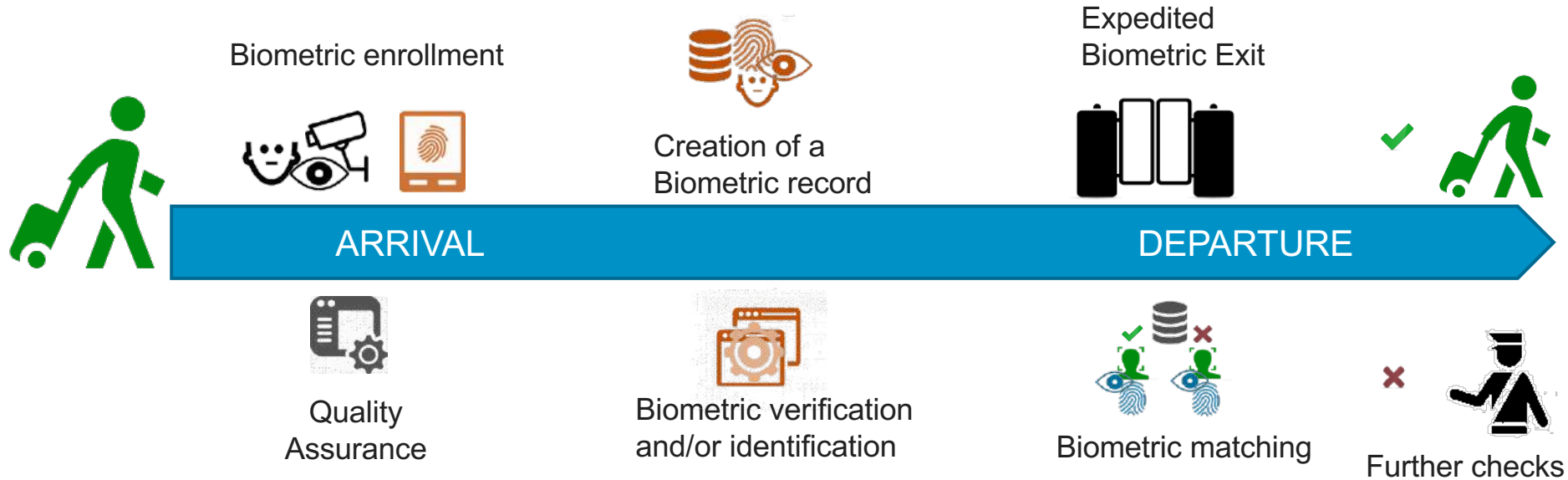
✘ Facilitation: facilitate legitimate traveler with fast border clearance for trusted travelers



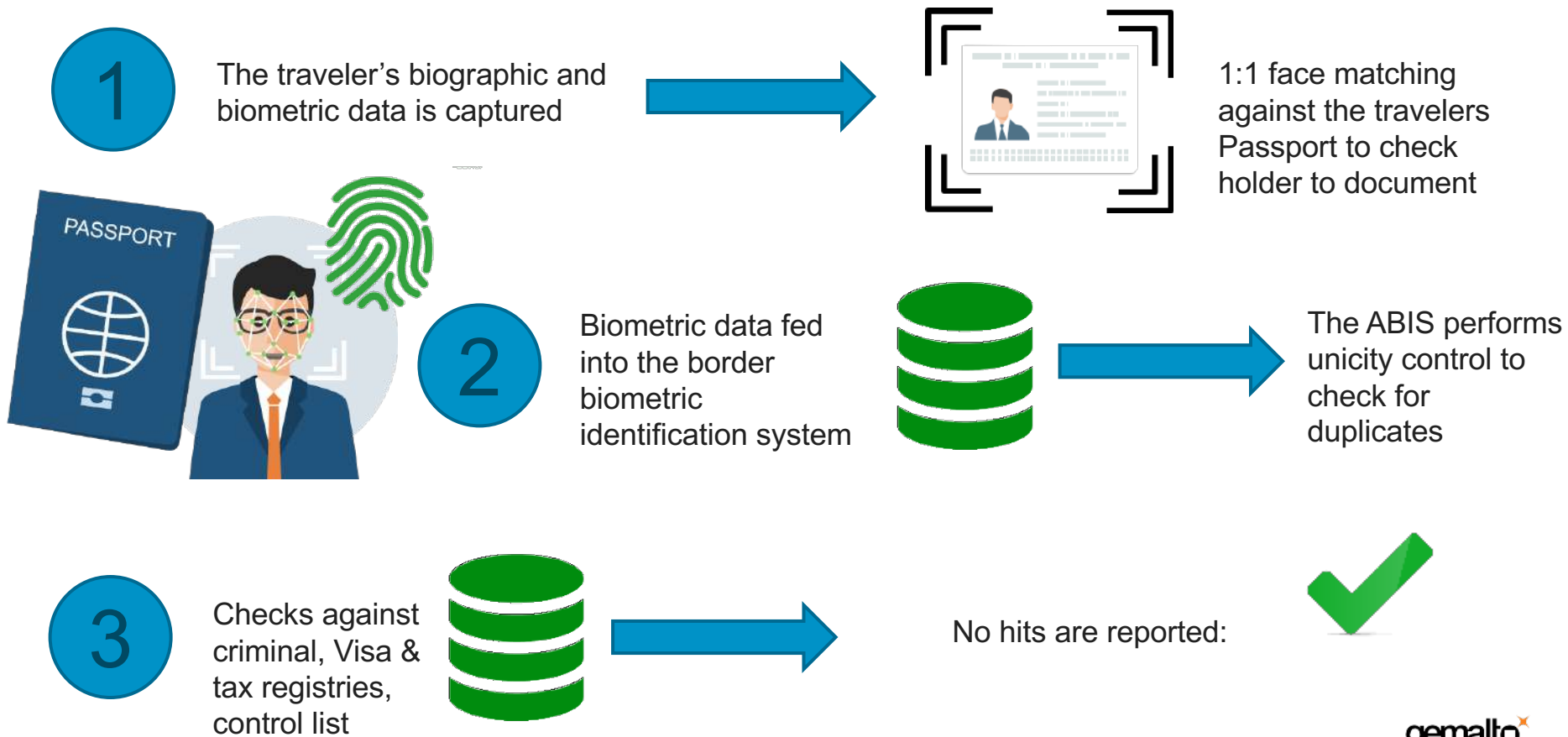
Biometrics is recommended by the UN the use of biometrics as part of their target of zero statelessness for all global citizens by 2024 and legal identity for all by 2030

Biometrics to allow Trusted Traveler Facilitation

- Biometric enrollment at 1st entry for TCN (third country national)
- Facilitated Exit with automated Biometric authentication
- Facilitated re-Entry once registered to the system



Biometric data: principles



Create or enhance a Travelers' Registry

- ✦ Nation: territory + population + “foreign population”
- ✦ Foreign population: rights and duties. Requires Identity !
- ✦ ID Convergence: National vs Foreign, Public vs Private
- ✦ Border, Visa, and Permits as front-end for enrolment
- ✦ Biometrics to secure traveler register (unique ID)
- ✦ Biometrics before border, at border, and inside the country
- ✦ Quality Assurance, Interoperability and System Integration

Passenger Registration

- ✘ Biometrics capture: Environment and Quality Assurance
- ✘ Biometrics for RTP and ABC: controlled environment
- ✘ Interoperability (National and International biometric systems)
- ✘ System integration with existing biometrics systems
- ✘ Strong document verification for strong identity validation
 - ✘ ICAO verifications
 - ✘ Security features verifications under 3 lights
 - ✘ Electronic verification: BAC, SAC-PACE, TA, AA, PA, EAC
 - ✘ Certificates handling and distribution
 - ✘ Biometrics QA and matching
- ✘ Biometrics verification to match traveler with his/her document

Automated Border Control Gate



2 step integrated



2-Step segregated



From a physical Gate

- Mechanical, all in one self service gate
- High traveler cooperation, use of traveler documentation



ENTER GATE

EXIT GATE

“SELF SERVICE” BORDER CONTROL

1



DOCUMENT
VERIFICATION
(PHYSICAL ID)

2



LIVE BIOMETRIC
AUTHENTICATION

3

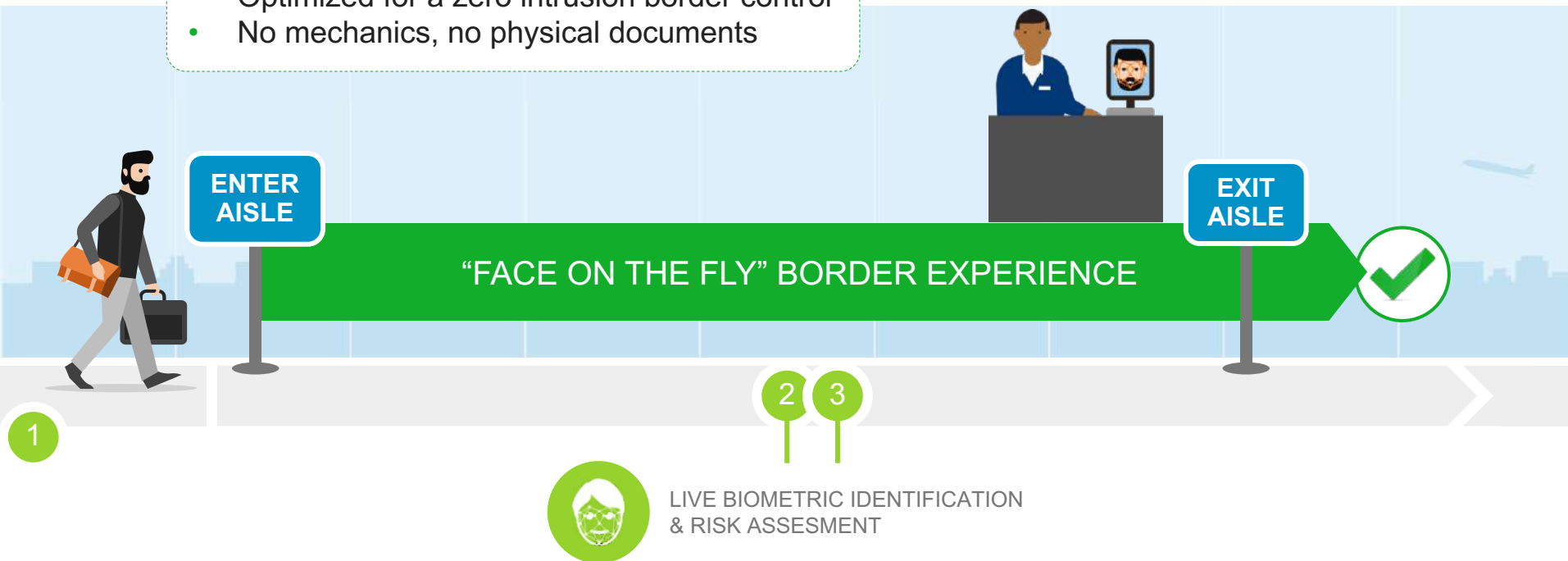


CHECK AGAINST
WATCHLISTS



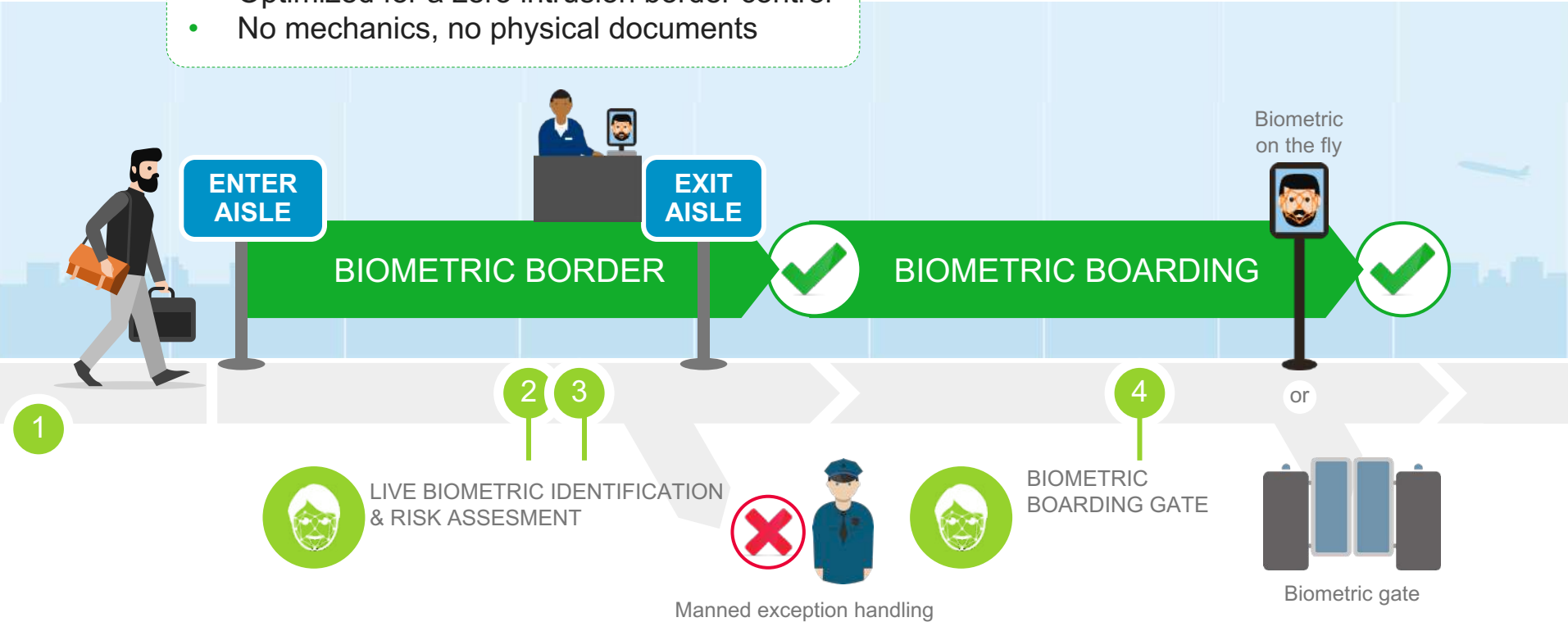
... to a Hands-free, Gateless Face Recognition Aisle

- Optimized for a zero intrusion border control
- No mechanics, no physical documents



...border and boarding: 2 separate processes

- Optimized for a zero intrusion border control
- No mechanics, no physical documents



... and more: all processes into 1

- Optimized for a zero intrusion border control
- No mechanics, no physical documents

GATELESS EXIT CONTROL + GATELESS BOARDING BASED ON FACE IDENTIFICATION

Biometric
on the fly

2

3

+

4

BIOMETRIC
BOARDING GATE

LIVE BIOMETRIC IDENTIFICATION
& RISK ASSESMENT

Fly to Gate Solution – Your Face is you ID!

Biometric enabled self-service to speed up & streamline traveler processes, from check-in to boarding



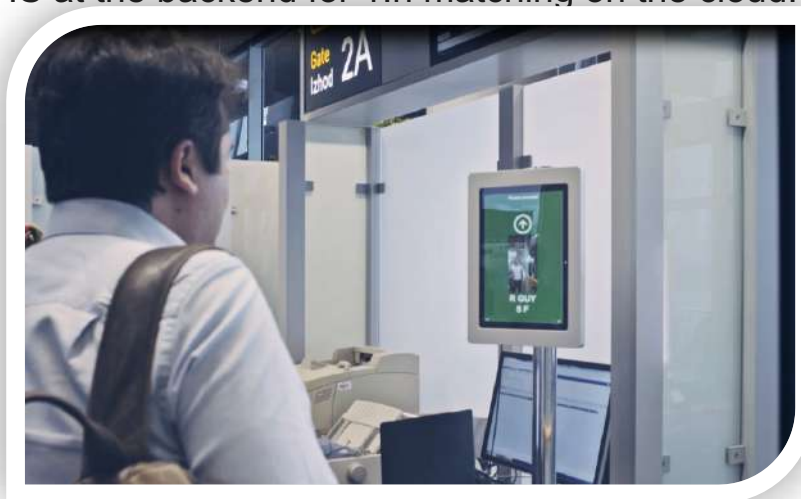
Biometric Boarding with Mobile Enrolment



- ✘ **Customer:** Passenger Processing System Provider for an airport in a European capital
- ✘ **Opportunity/issue to address:** Speed up boarding time and propose a breakthrough in the passenger experience.
- ✘ **Solution scope:** facial enrolment with LFIS technology on mobile and passenger identification at the boarding gate with Face Recognition Pod capturing passenger and displaying match result. LFIS at the backend for 1:n matching on the cloud.



175
passengers taking
part in the
trial



Total
boarding
time
reduced
by up to
30%

Conclusions

Using Biometrics and related tools

- ✘ Strong document verification for strong identity validation
- ✘ Biometrics capture: Environmental conditions and Quality Assurance
- ✘ Assure Interoperability (raw images and standard templates)

A consultancy approach

- ✘ Identify your needs and challenges and define the objectives
- ✘ Decide and plan how to use biometrics to achieve the objectives (using metrics)
- ✘ Manage Security + Passenger Facilitation + Traveler Registry
- ✘ Adapt to the reality of the country and future proof

Thank you

