



Testing the borders of the future

NATIONAL PERSPECTIVES FROM THE GREEK LAND & SEA BORDERS SMART BORDERS PILOT AND RELEVANT RESEARCH PROJECTS

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The initial Proposal

- Entry Exit System
- Registered Traveler Program
- SBC Amendment



Proof of Concept

- Technical Study
- Pilot

The Technical Study Main Findings

■ EES

- TOM A (*Using only FI and no systematic 1:N identification*)
- TOM B (*Using FI, 4 FPs and systematic 1:N identification at first entry*)
- TOM C (*Using FI, 8 FPs and systematic 1:N identification at first entry*)

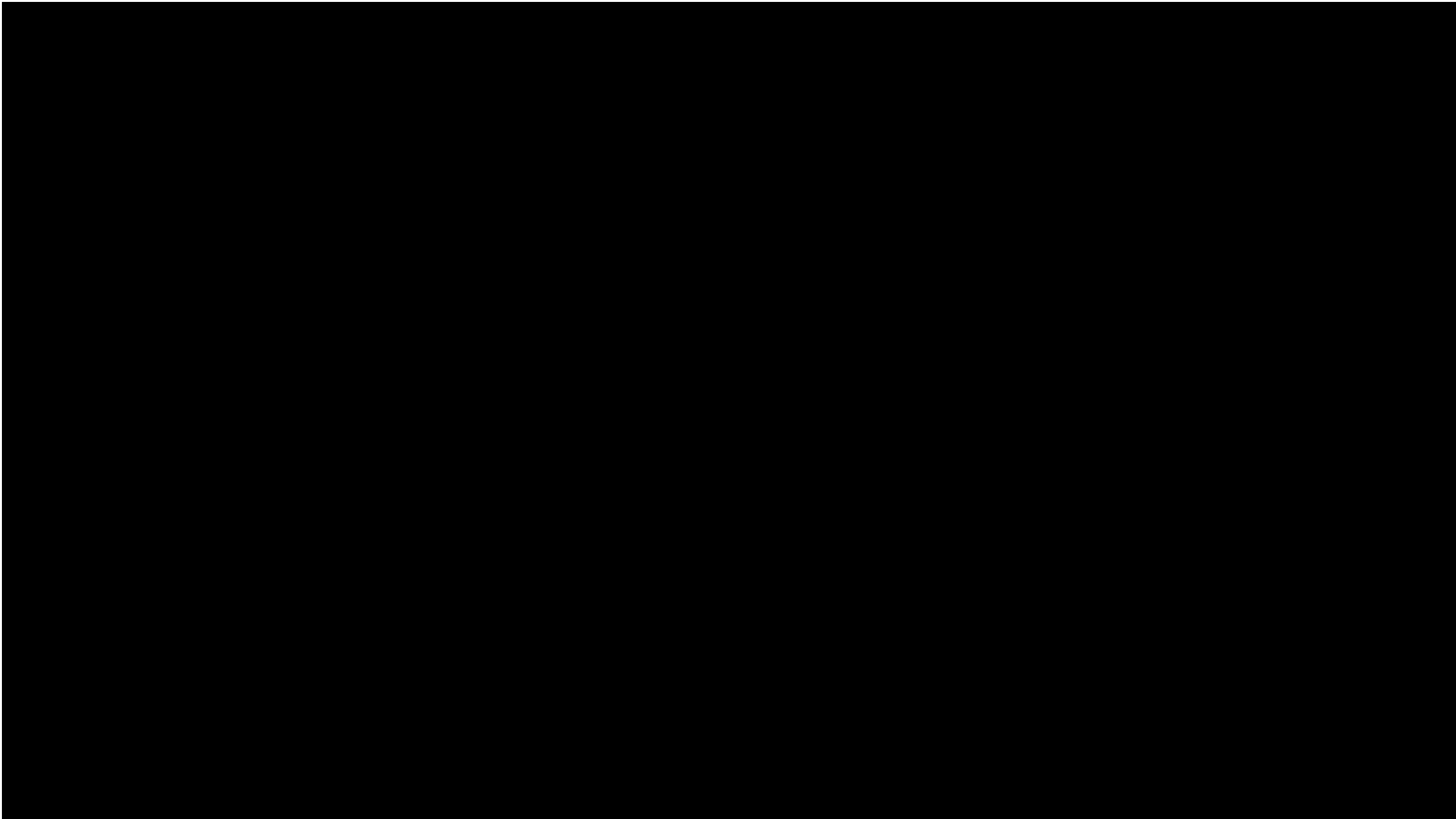
■ RTP

- TOM M (*fingerprints and photo being part of the registration in the RTP application process (VE)*)
- TOM N (*rely on the existing biometrics of the EES (VE)*)

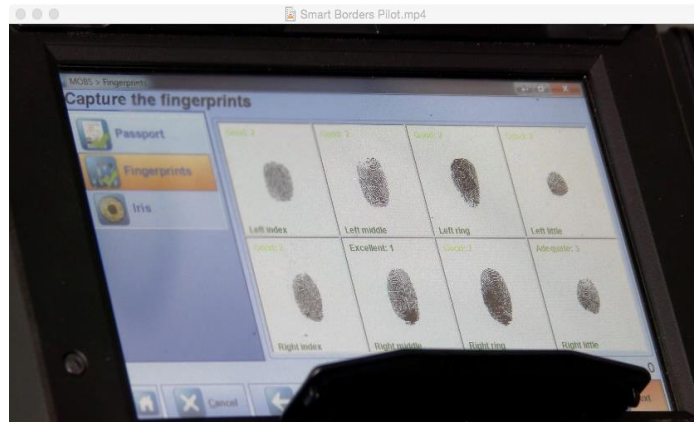


Smart Borders Pilot

- **Kipoi Evrou (17/04/2015 – 19/08/2015)**
 - Checks using hand-held device
- **Port of Piraeus (04/05/2015 – 09/08/2015)**
 - On-board checks using mobile suit-case



Smart Borders Pilot: Kipoi setup





Smart Borders Pilot: Kipoi TC's

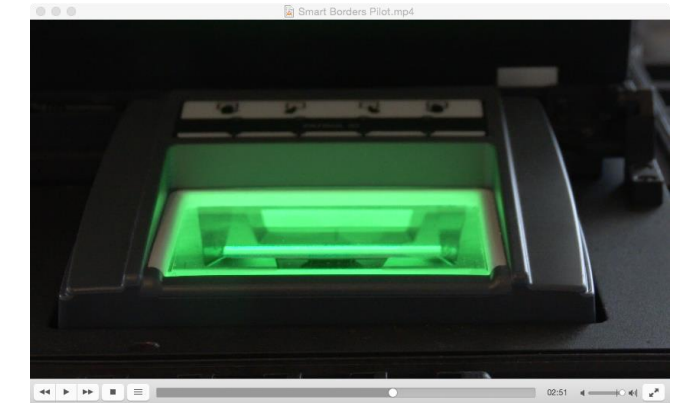
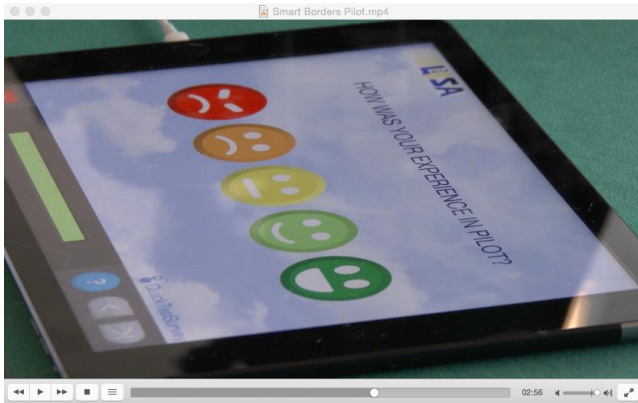
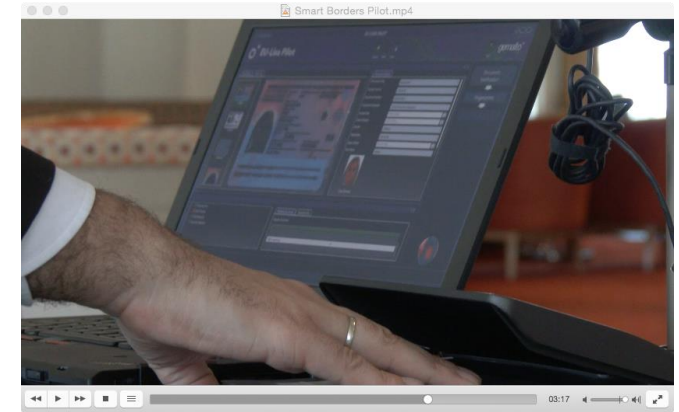
- TC1: Enrolling 4 fingerprints
- TC2: Enrolling 8 fingerprints
- TC3: Enrolling 10 fingerprints
- The above were always combined with:
 - TC5: Capture of iris pattern



Smart Borders Pilot: Kipoi Results

- The device could be helpful in case of large queues
- The device is sufficient for max 4 fingerprints
- Iris capture was difficult in eastern Asian travelers
 - It would be interesting to test this device for facial enrollment

Smart Borders Pilot: Piraeus setup



Smart Borders Pilot: Piraeus TC's

- TC1: Enrolling 4 fingerprints
- TC4: Enroll live facial image
- TC6: Capture facial image from e-MRTD
- TC7: Verification of FI captured from e-MRTD against a live facial image



Smart Borders Pilot: Piraeus Results

- An end-2-end process would be more enlightening
- Photo was very reliable and more acceptable
- Process helpful, the device not very reliable
- Travellers Reluctant, hesitant, suspicious, sceptical mainly due to the fingerprints

The amended Proposal

Entry Exit System

- 4 fingers + Facial Image
- EES + VIS interoperability
- 5 years retention period
- Law Enforcement Access

SBC amendment

- Regulates ABC systems
- National Facilitation Programs
- Facilitation of Border Crossings



National Facilitation Programs

- Optional for MS
- Voluntary for Travelers
- Not centralized
- Shall be assessed before the end of the third year of application of this Action in order to conclude whether to be established as a Union Program
- Derogation to the thorough checks
- How to ensure harmonization?

The Verdict

- The abolition of stamping: the most groundbreaking feature in Smart Borders
 - Shall reduce dramatically the border control time
 - Promotes Border Control Automation
 - It may lead to a paperless Passport
- National Facilitation Programs need to further harmonized and promoted
- ABC and Facilitation systems need to be further standardized between MS

Taking the Smart Borders Pilot One Step Further



The FastPass Profile



a harmonized, modular reference system for all European automated border crossing points

Facts:

Project start: 1.1.2013

Project duration: 4 years

Funding: EU FP-7 Security

Coordinator: Markus Clabian, AIT Austrian Institute of Technology

Consortium: 27 partners

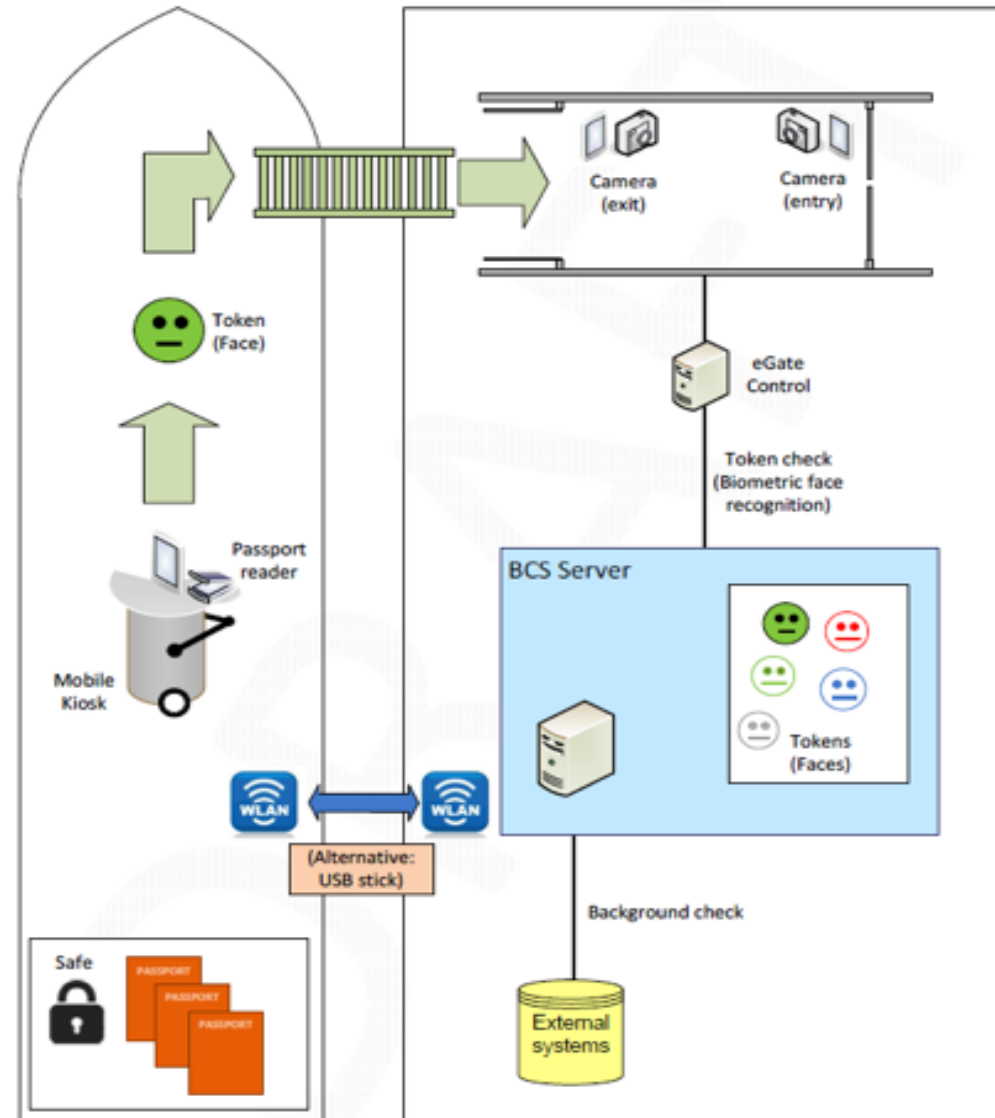


Source: <https://fastpass-project.eu>



FastPass sea

(Last update: 03.12.2014)



FastPass Concept Innovations

Semi-
Paperless
Process

Self-Service

Smart Borders
Ready

Open-Gates
Approach
Ready

Integrates
Ship's Security

Smart Borders – FastPass

Greek Sea Borders Scenario Comparison

Smart Borders Pilot

- 4 fingers Enrollment
- Live Facial Image Capture
- Capture facial image from e-MRTD
- 1:1 Verification
- **NO** 1:n Verification
- Manual Process
- **NO** End-to-End Process
- Max 125 enrollments per trip

VS

FastPass Pilot

- **NO** fingers Enrollment
- Live Facial Image Capture
- Capture facial image from e-MRTD
- 1:1 Verification
- 1:n Verification (at the e-Gate)
- Self-Service (2 Kiosks + 1 e-Gate)
- End-to-End Process
- Max >350 enrollments per trip



Athens International Airport ABC Pilot

- Private-Public Sector Collaboration
 - Procurement Published on 21/09/2016
 - Proposals evaluation during November
 - Rollout – Second quarter 2017
- Mainly based on the knowledge gained from Smart Borders Proof of Concept and Fast-Pass Project
- We envisaged to be established as a best practice for
 - Greek regional Airports
 - Greek Seaports

Human Factors

The BODEGA Project Profile



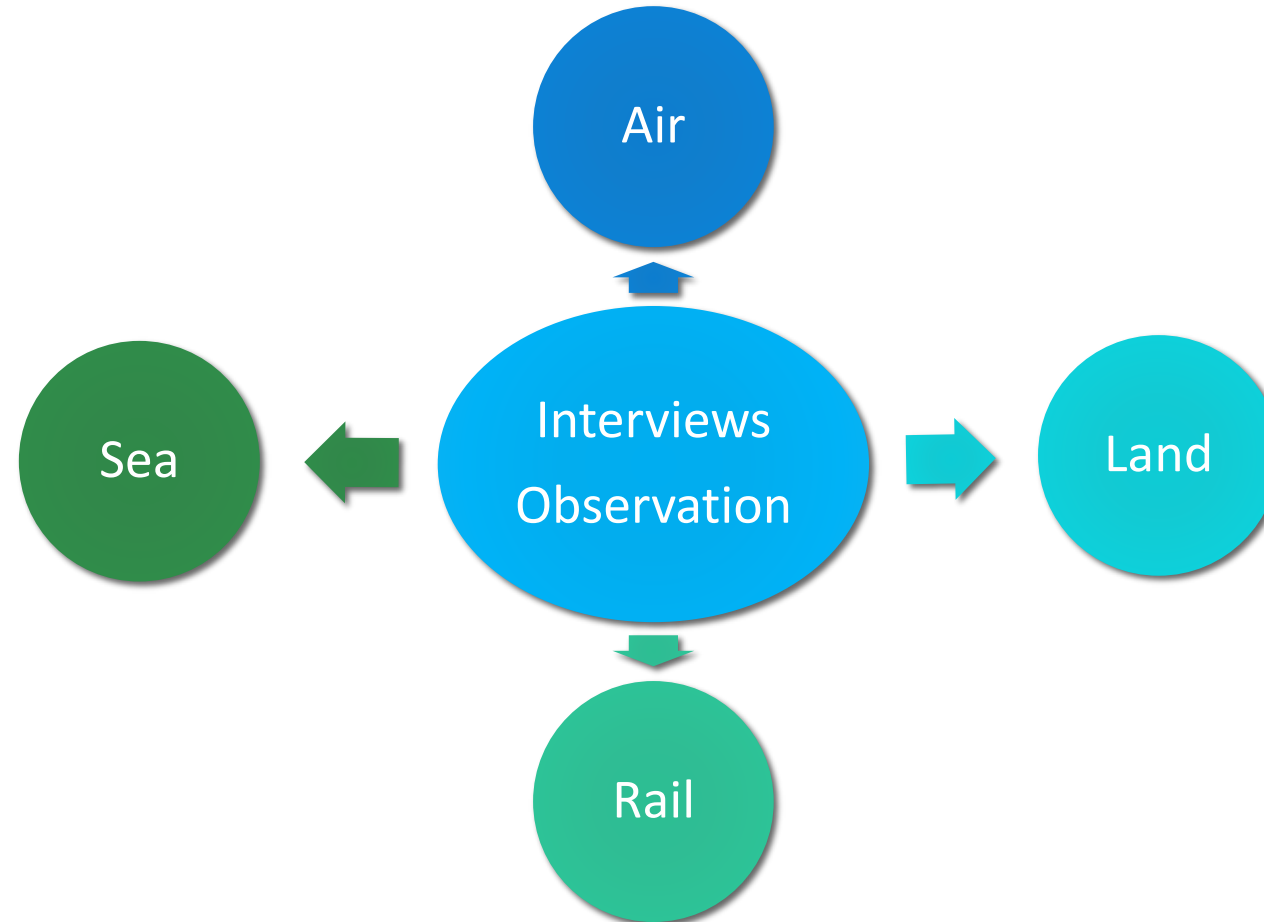
Proactive Enhancement
of Human Performance in Border Control



Source: <http://bodega-project.eu>



Field Studies



Human Factors

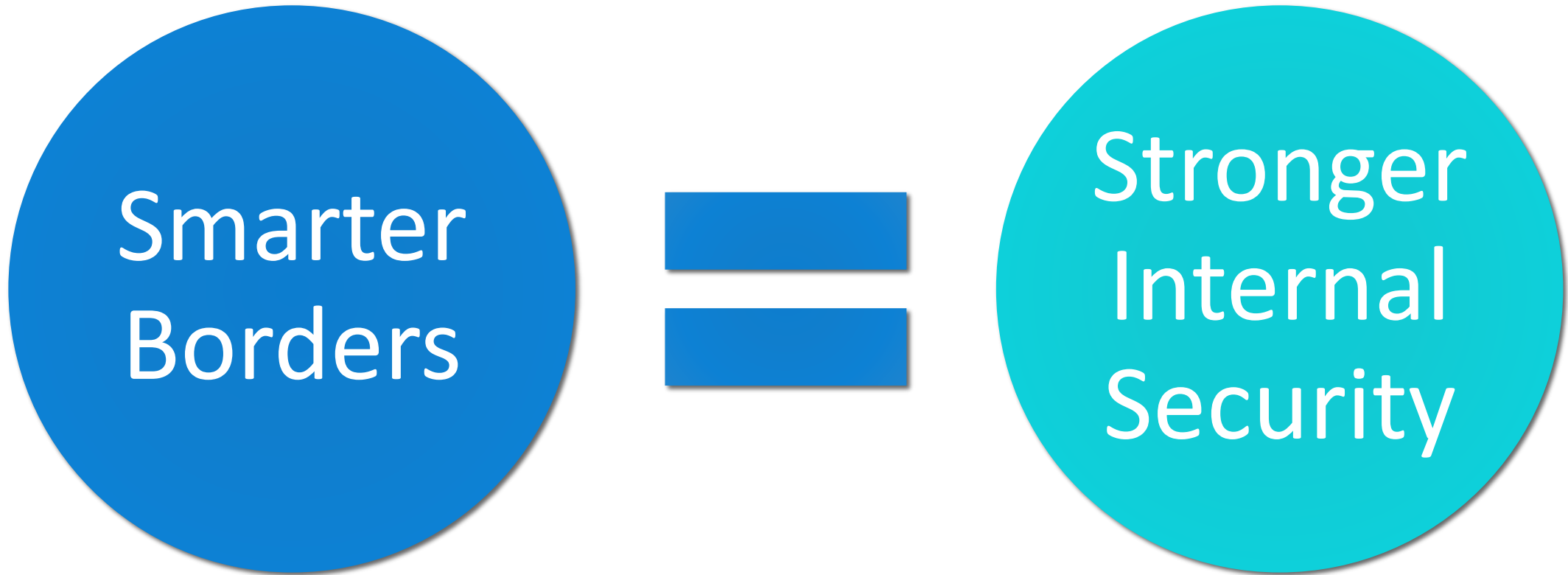
The BODEGA Project



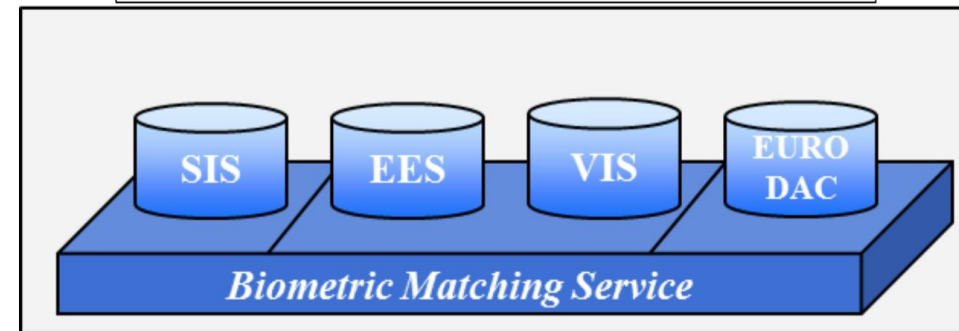
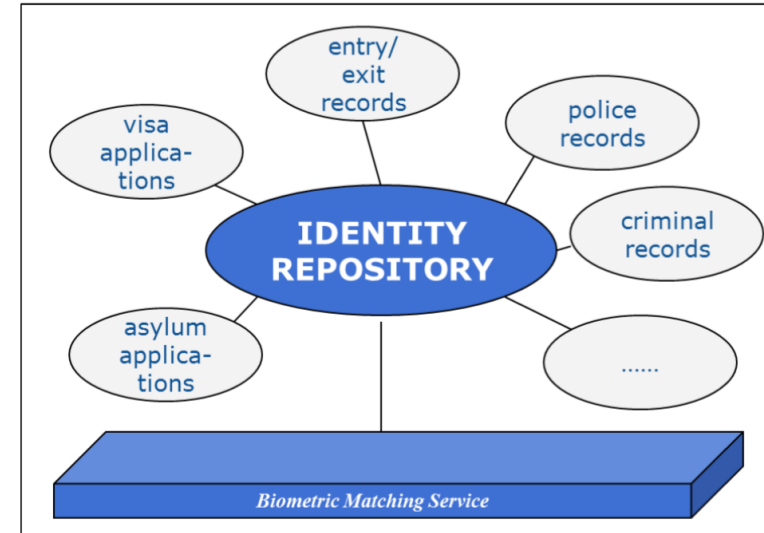
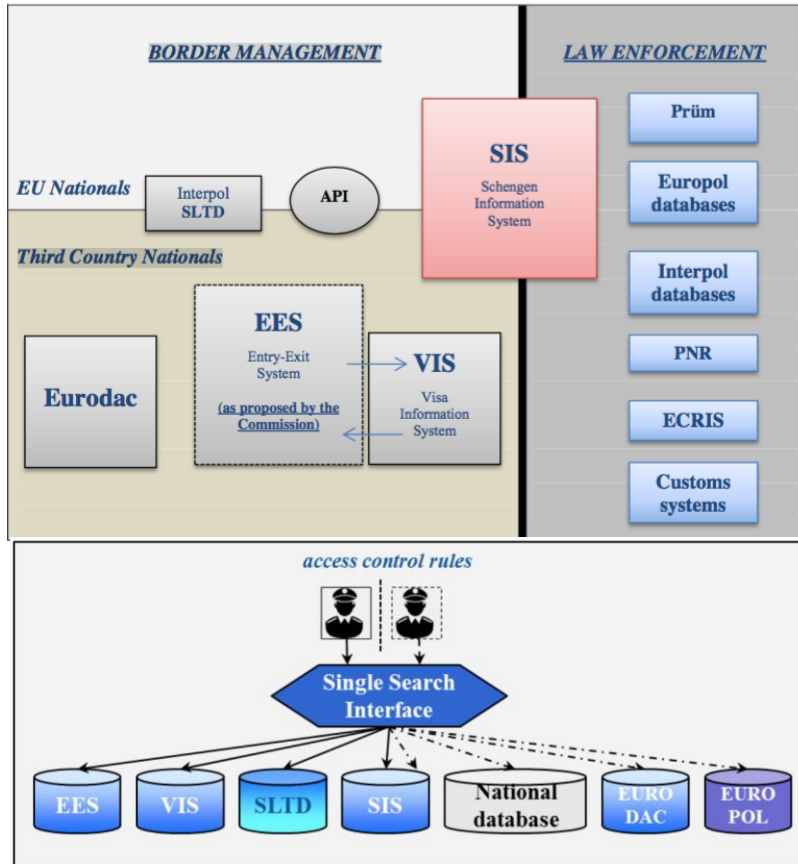
- Harmonization/standardization in order to provide a unified service
- Better BGs/Travelers experience
- Leveraged effectiveness through automation
- Advanced security through better identification
- Redeployment of BGs to deal with other areas
 - Threat assessment -
 - Predictive Profiling



Smart Borders - A continuous process



Smarter Borders & Stronger Internal Security



* COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL, "Stronger and Smarter Information Systems for Borders and Security", Brussels, 6.4.2016 COM(2016) 205 final



Summary

- Smart Borders shall facilitate border control and shall provide awareness to all MS
- Further steps need to be done
 - Smart Borders implementation
 - Smarter Borders and Strengthen Internal Security Roadmap



Thank you for your attention!

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