FastPass - A HARMONIZED, MODULAR REFERENCE SYSTEM FOR ALL EUROPEAN AUTOMATED BORDER CROSSING POINTS

FastPass in facts:

27 partners
4 years duration
Started on **1.01.2013**
Coordinated by **AIT** Austrian
Institute of Technology
15,5 million € budget

OBJECTIVES

- Improving the **security, the throughput and the efficiency** of the automated border crossing (ABC) process in Europe
- Developing and demonstrating a **user friendly solution**, being both a noteworthy support for the **border guard** in its daily tasks and an easy-to-use interface for the **passenger**
- **Harmonisation and innovation**: FastPass develops one reference architecture serving many processes at the three different types of borders and proposes:
  o the first European solution for cars at land border with ABC;
  o the first solution for cruise ships;
  o a deep comparison of different approaches on an air border crossing point.

DEMO SITES

FastPass developed several scenarios for testing its solution at three different demo sites:

The demonstration at Moravita (Romania) will propose a process based on face recognition in infrared and visible light spectrum against e-passports and ID cards. The vehicle documents will be also taken into account.

At the port of Piraeus (Greece), a focus will be made on both face and iris recognition (in infrared and visible light spectrum) for all kind of passengers having an e-passport.

At Vienna airport (Austria), various use-cases for the air border crossing process will be tested, including the classical two-step solution and segregated two step solution with the passport or the face as a token for European citizens and selected third country nationals. A last variant considers the use of the Registered Traveller Programme Database and the integration of iris recognition.

RELEVANT TECHNOLOGIES

Travel Document Observation

- **Improved** optical and electronic **verification**
- **Doc teacher** functionality
- Additional security checks and **device security**

Face and iris sensor

Biometric Identification

- **Fingerprint:** Development of two-finger fingerprint reader prototype, Innovative finger placement mechanism
- **Face:** Refined on-the-move face verification, Innovative Adomo® mirror technology, Indoor and outdoor acquisition
- **Iris:** Novel face-and-iris prototype, Multispectral iris capture sensor
- **Counter-spoofing:** 3D based counter-spoofing for gate and kiosk
- **Novel biometrics:** Sclera segmentation, 3D periocular recognition
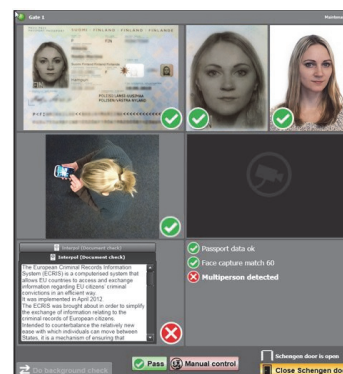
An innovative and intuitive border guard interface

Gate Usability Design

- Border guard **usability module**
- Video management system
- eGate design
  (more glass, open appearance, modular build, flexible layout)

Security Assessment and Risk Mitigation

- Threat Modelling,
- Risk Analysis
- Privacy Impact Assessment

Possible new design of egates, by partners Magnetic and Gunnebo

FURTHER INFO

Be continuously informed about the progress of our project and subscribe to our newsletter through our website: www.fastpass-project.eu
Any further question? Write an email to: FastPassCoordinator@ait.ac.at