



ICAO Ninth Symposium and Exhibition on MRTDs, Biometrics and Border Security 22-24 October 2013

FastPass

Dr. Markus Clabian
Senior Engineer, AIT Austrian Institute of Technology,
Austria
Coordinator of the FastPass project



FastPass



What is FastPass?

FastPass develops a harmonized, modular reference system for all automated border crossing points developed from a user-centric approach that eventually serves as an industry standard for the implementation of eGates.





FastPass

Motivation


Challenges:

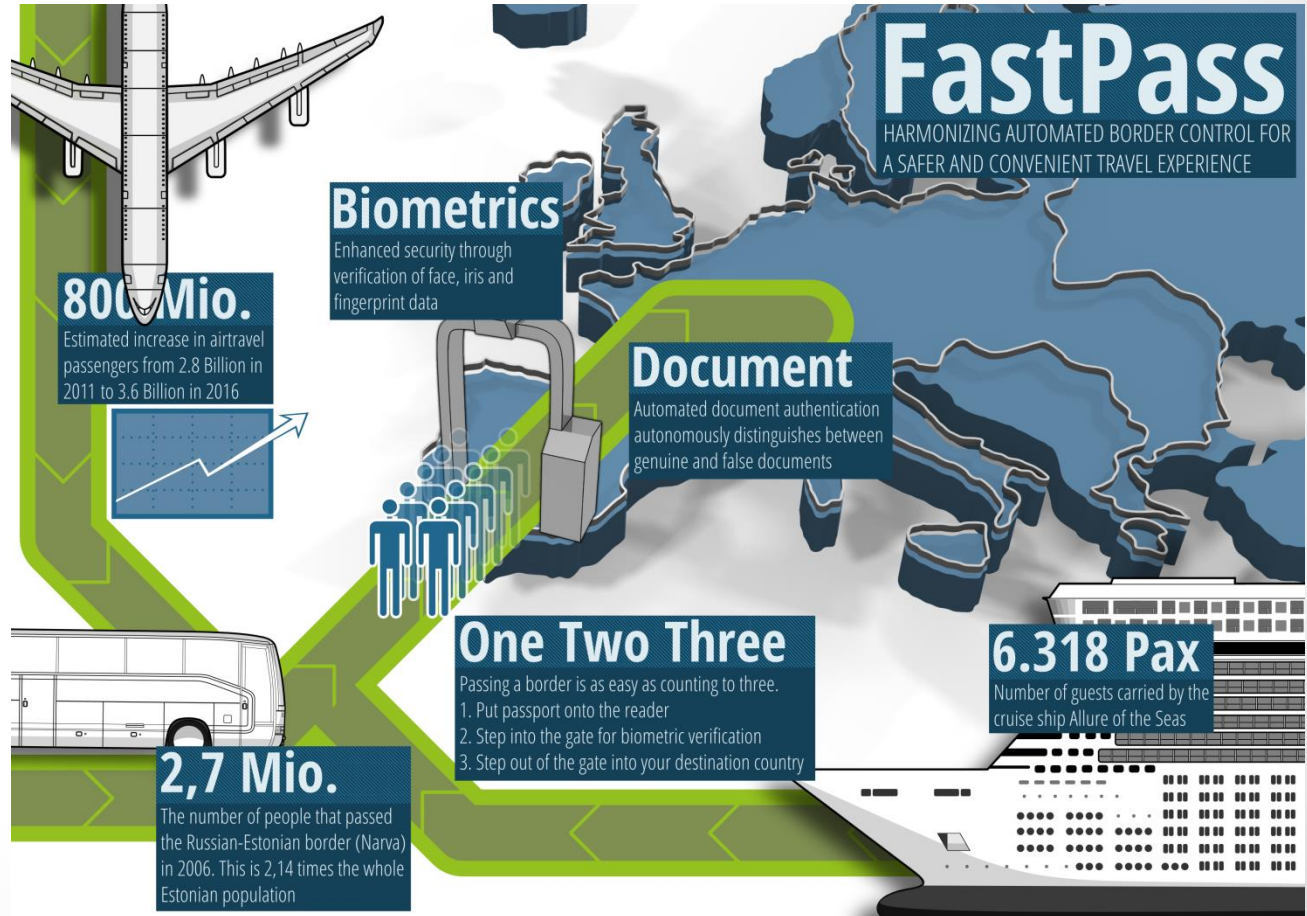
Passenger flow 

Requirements on the border control process 

System risk assessment 

Harmonization 

Variety in usage 

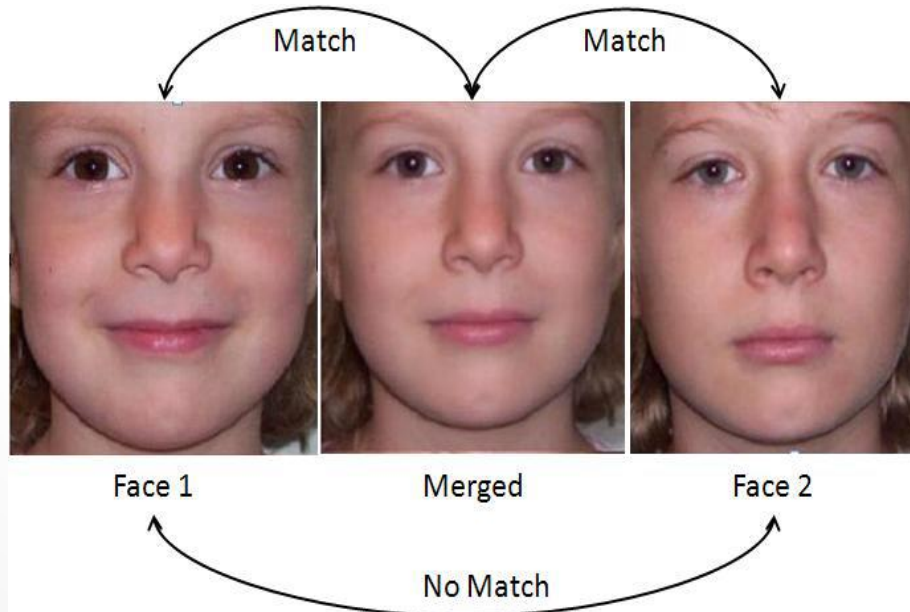




FastPass

Why do we need research on ABC ?

- **Current systems have not been security evaluated**
 - Passport security features are only partially checked
 - Biometric spoofing is not fully addressed
 - Passport document lifecycle is not fully addressed

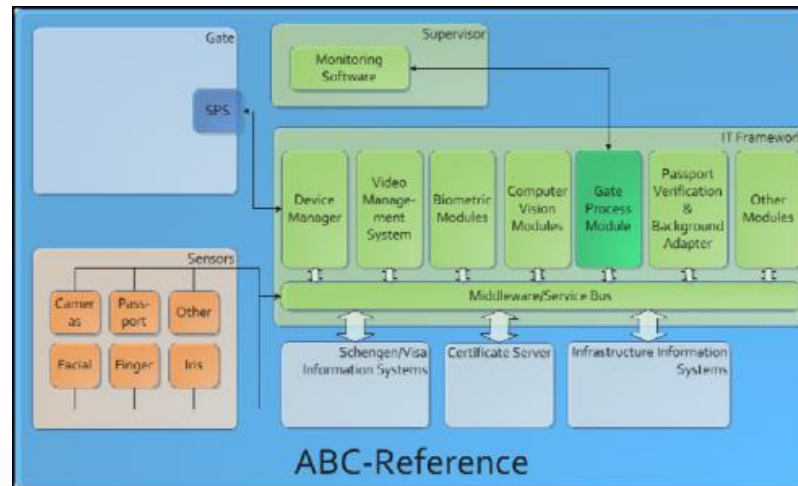




FastPass

Why do we need research on ABC ?

- **Current systems are limited**
 - No usage by third country nationals
 - No usage by frequent travellers
 - No harmonization and no interoperability
 - No or weak integration into infrastructure processes





FastPass



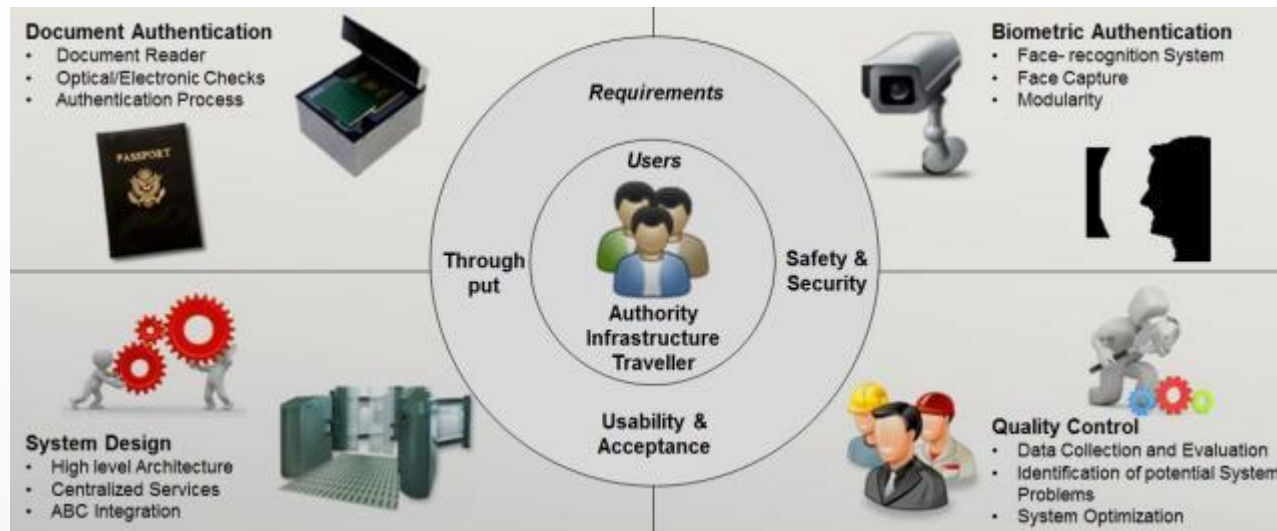
Why do we need research on ABC ?

- **Current systems are not developed around the user**
 - No harmonized usage
 - No customer interaction and satisfaction management
 - Human factors are not analyzed and considered
 - Privacy issues are not properly addressed



The FastPass Project

- Project start: 1.1.2013
- Project duration: 4 years
- Funding: EU FP-7 Security
- Coordinator: AIT Austrian Institute of Technology

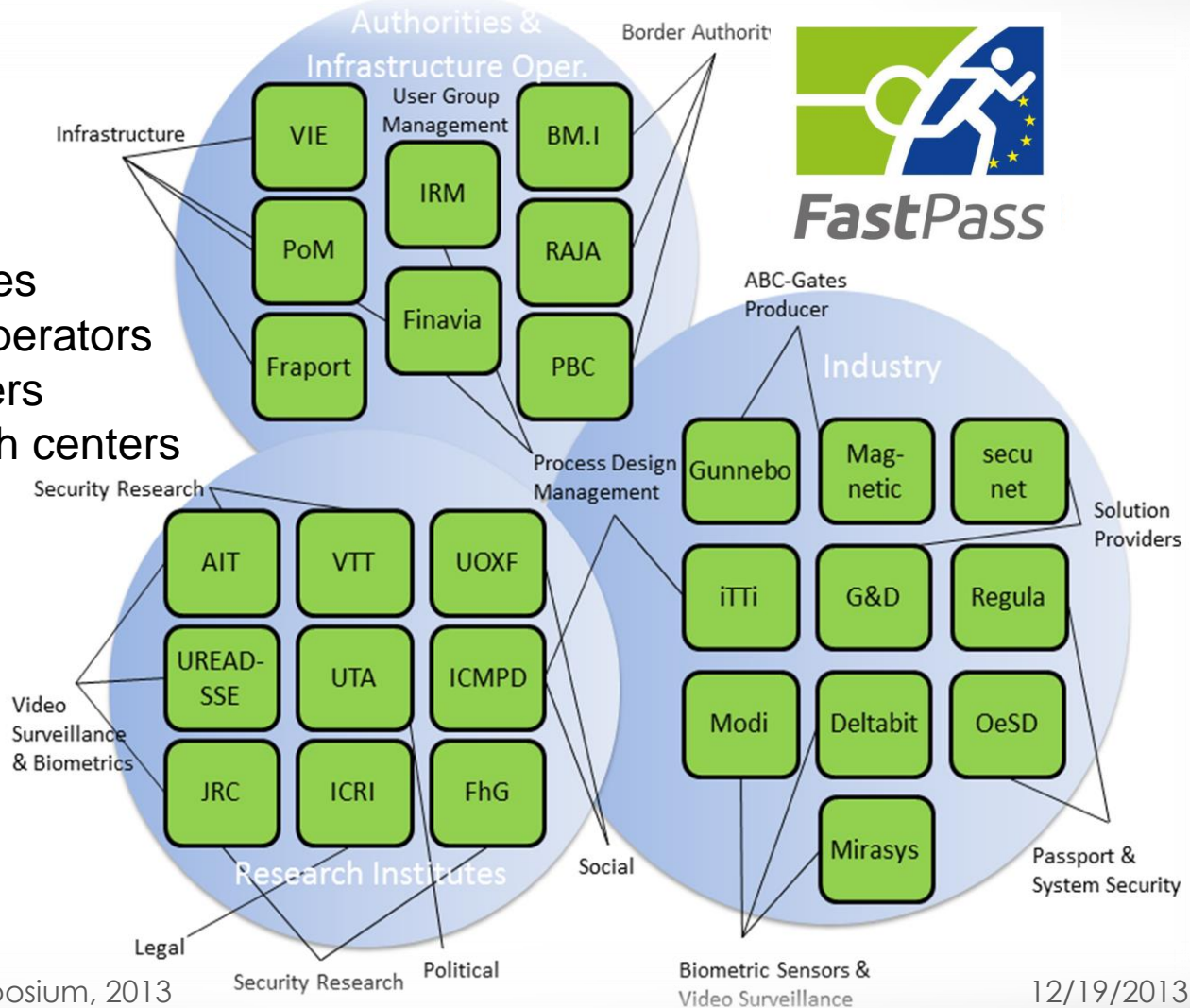


Key element: The users are in the center of innovation!

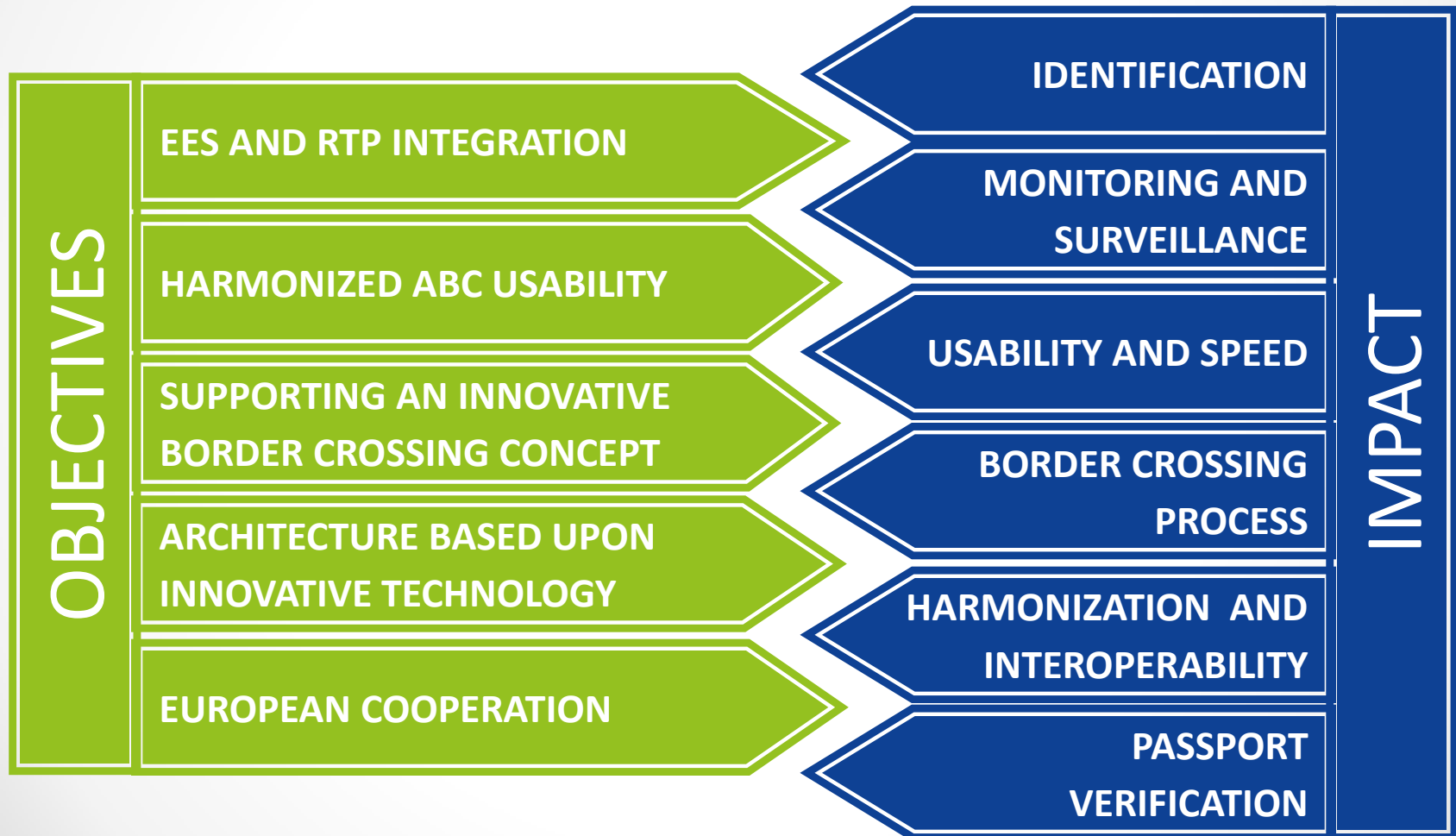
FastPass - Consortium

27 partners:

- 3 border authorities
- 4 infrastructure operators
- 11 industry partners
- 5 applied research centers
- 4 universities



FastPass Objectives

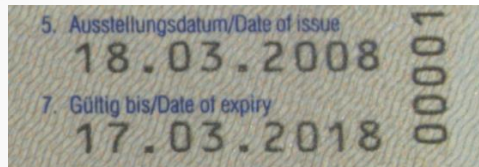


Expected Outcome

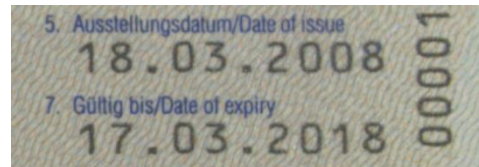
- **New technologies**
 - Identification
 - Document checking
 - Surveillance
- **Standards (technology, harmonized usage and security)**
- **Demonstrators at land, air and sea borders (at least three demonstrators in three different member states)**
- **Proposal for process improvements**

First key findings

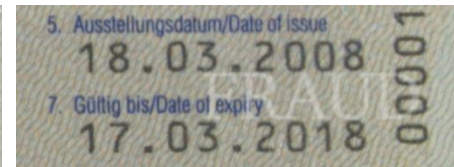
- **Dependability management as key element of a successful deployment**
- **Document security in the age of ABC**



(a) Original

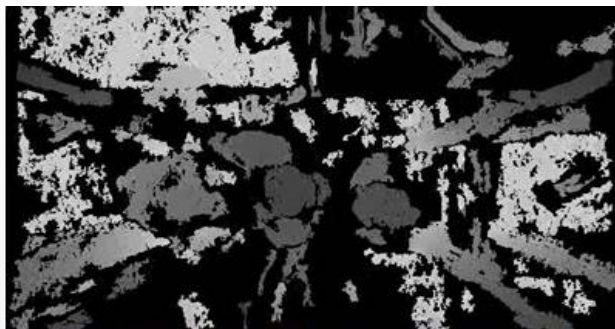


(b) Rotated by 0.3 degrees,

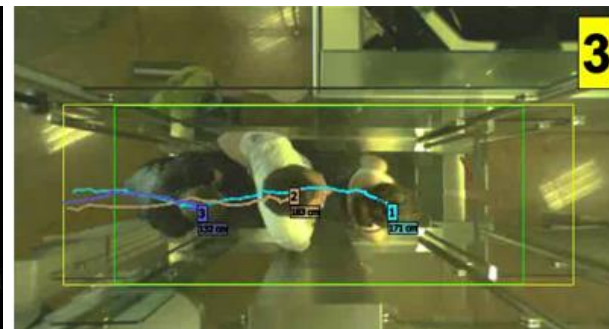


(c) Text overlaid

- **Video surveillance as added value to ABC systems**



(a) Depth image (top view camera)



(b) video stream with person separation



THANK YOU

Contact Information

E-mail: markus.clabian@ait.ac.at

Tel.: +43 664 8157890



The work has been supported by the FastPass project. The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 312583.

This publication only reflects the author's view and the European Union is not liable for any use that may be made of the information contained therein.

All document contained therein cannot be copied, reproduced or modified in the whole or in the part for any purpose without written permission from the FastPass Coordinator with acceptance of the Project Consortium