



FastPass – A reference system for next generation ABC systems



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Overview

- **Motivation and Objectives**
 - Overall objectives
- **Innovation Approach**
- **Work Package Structure and Status**
- **ABC and VIS**
- **Timeline and ResultS**
 - Current Systems
 - Next Generation Systems and new Processes
- **Summary**

Motivation

Challenges :

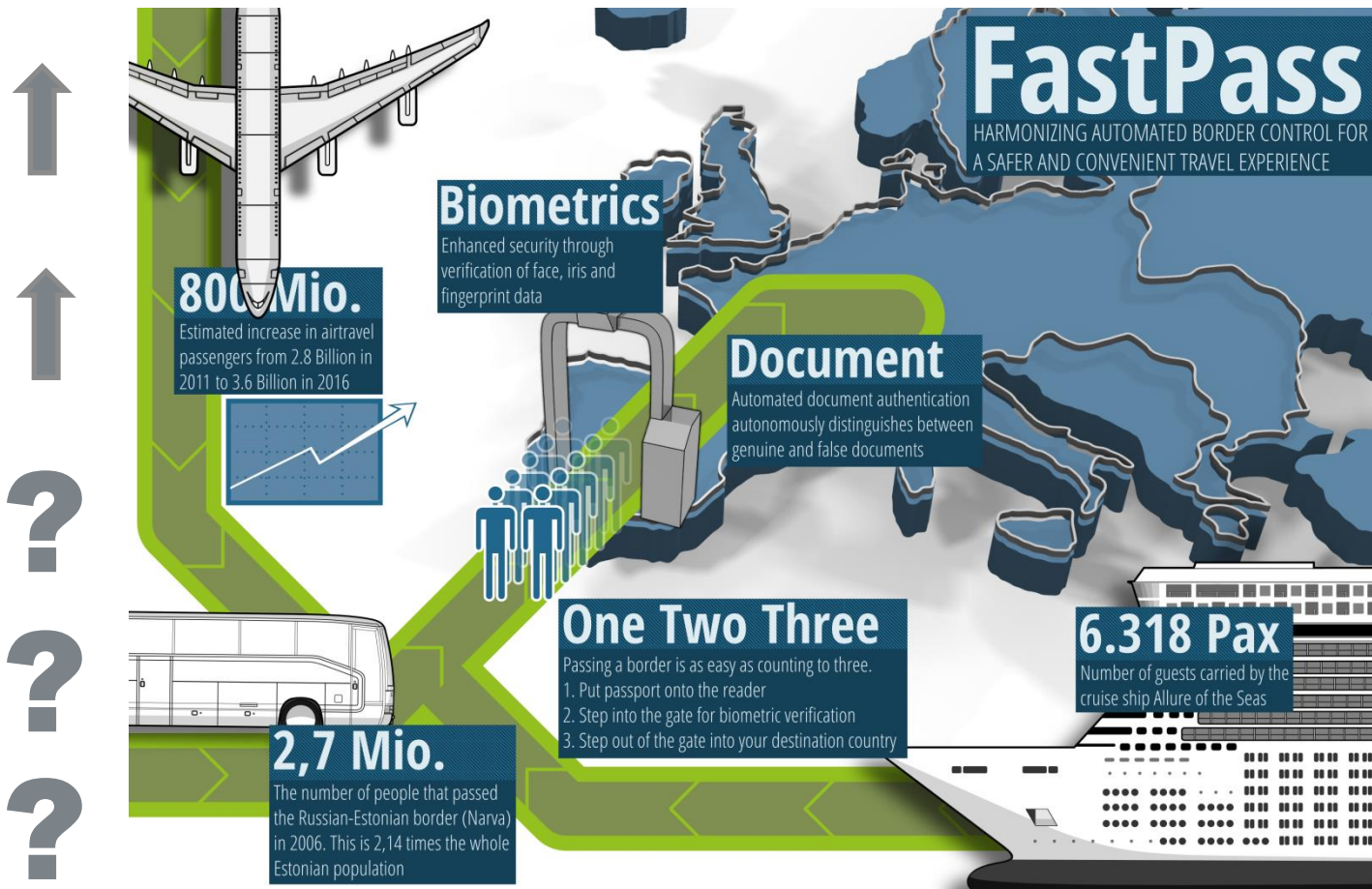
Passenger flow

Requirements on
the border control
process

System risk
assessment

Harmonization

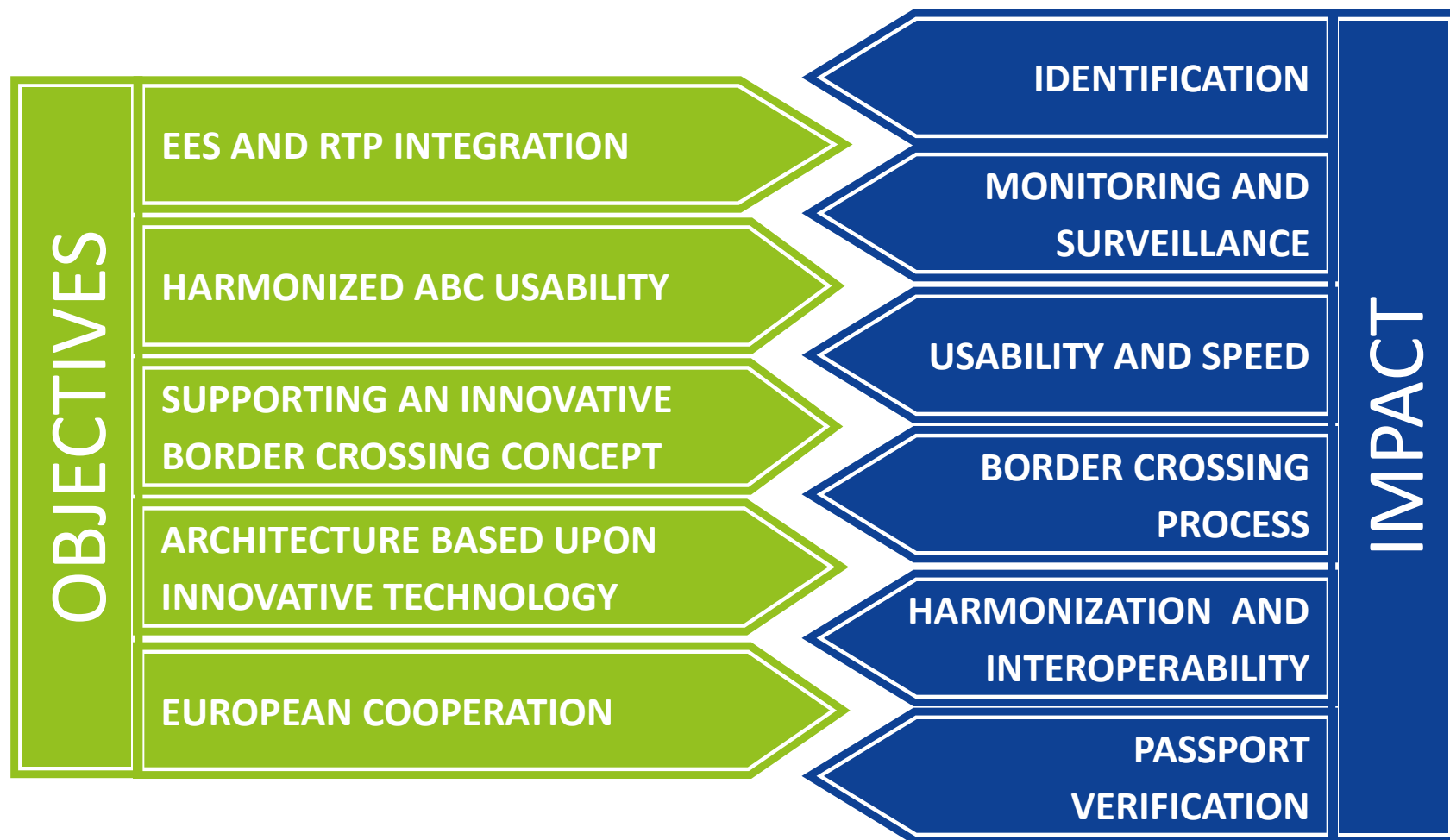
Variety in usage



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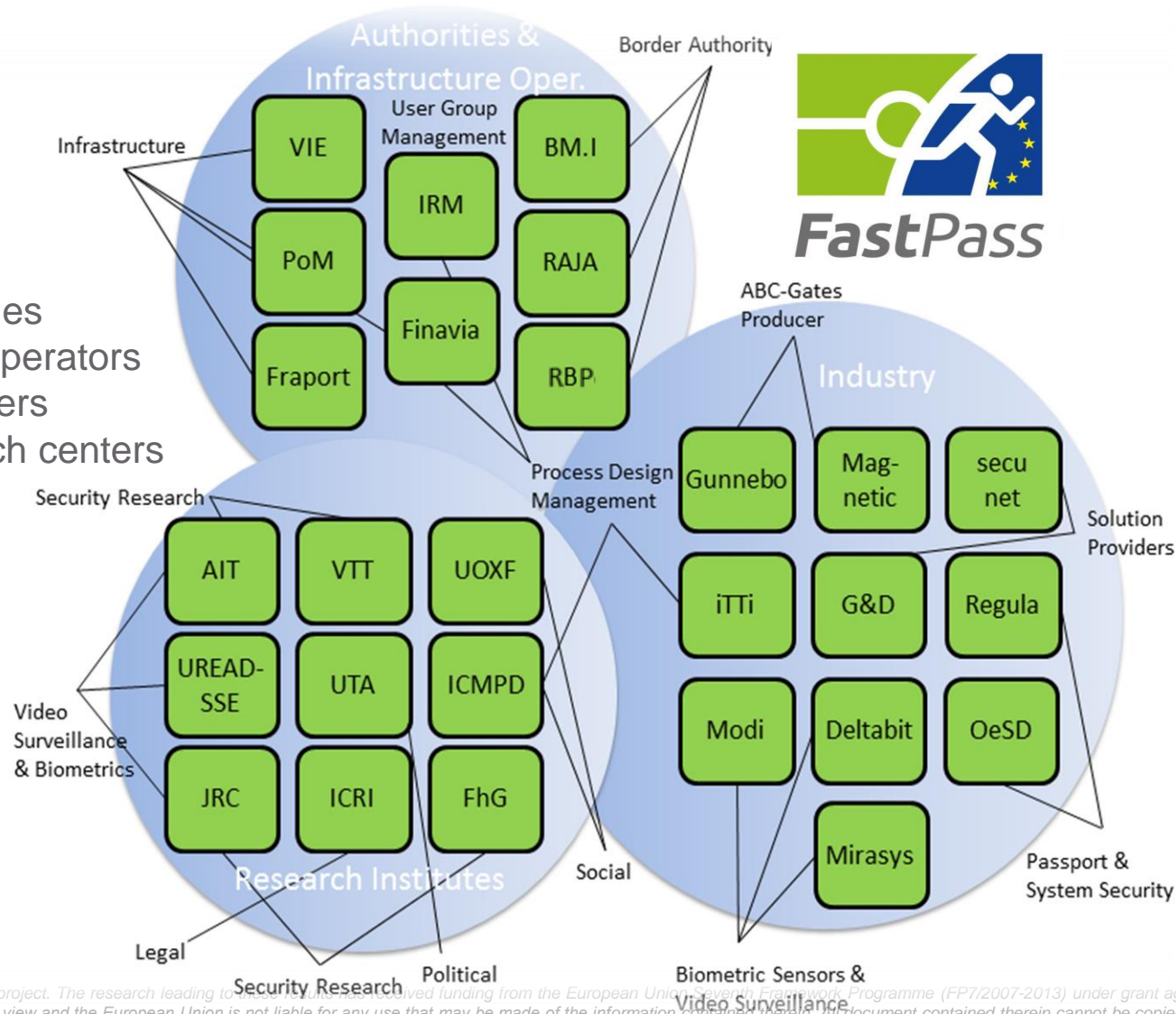
FastPass Objectives



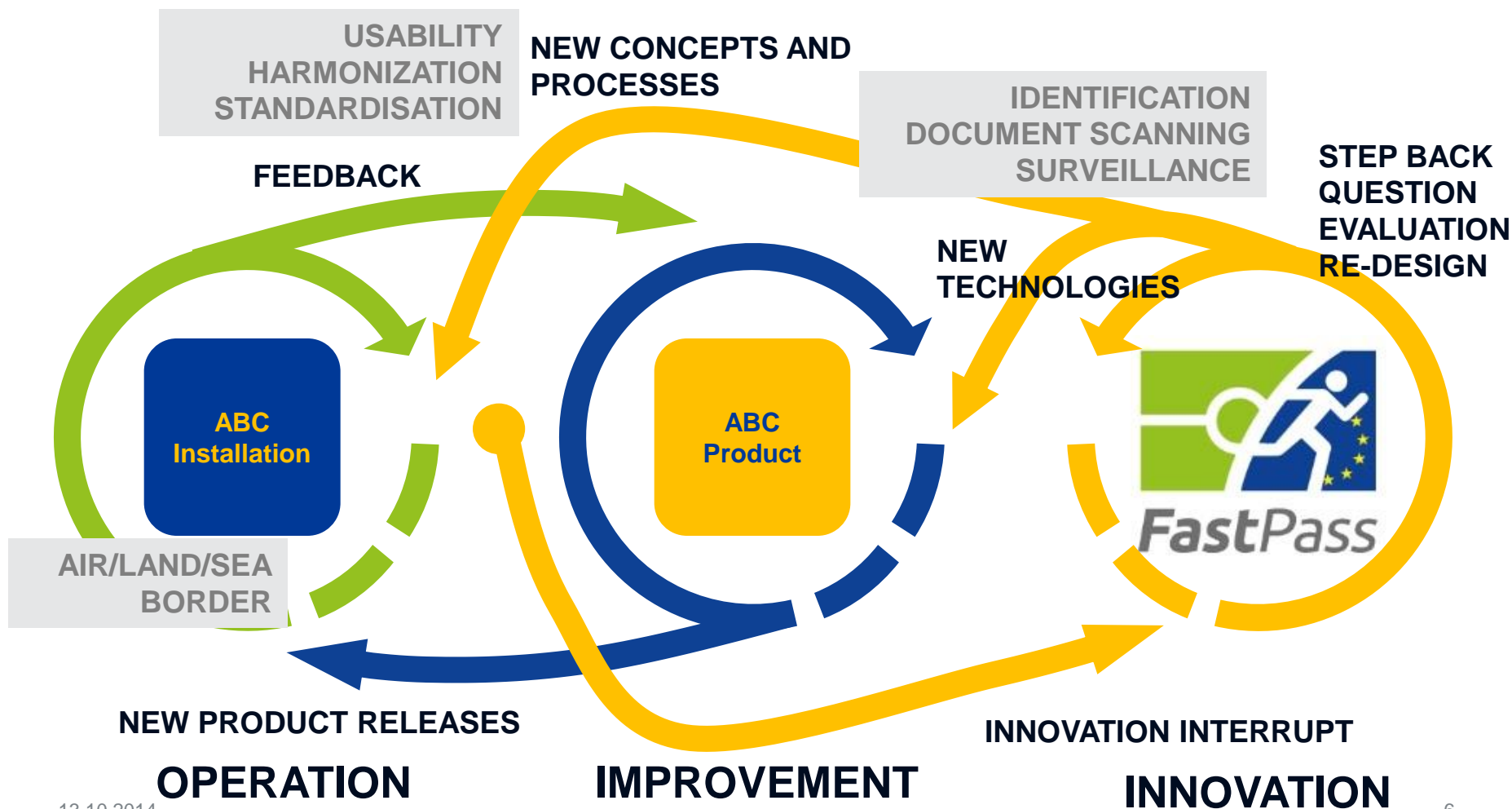
FastPass - Consortium

27 partners:

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

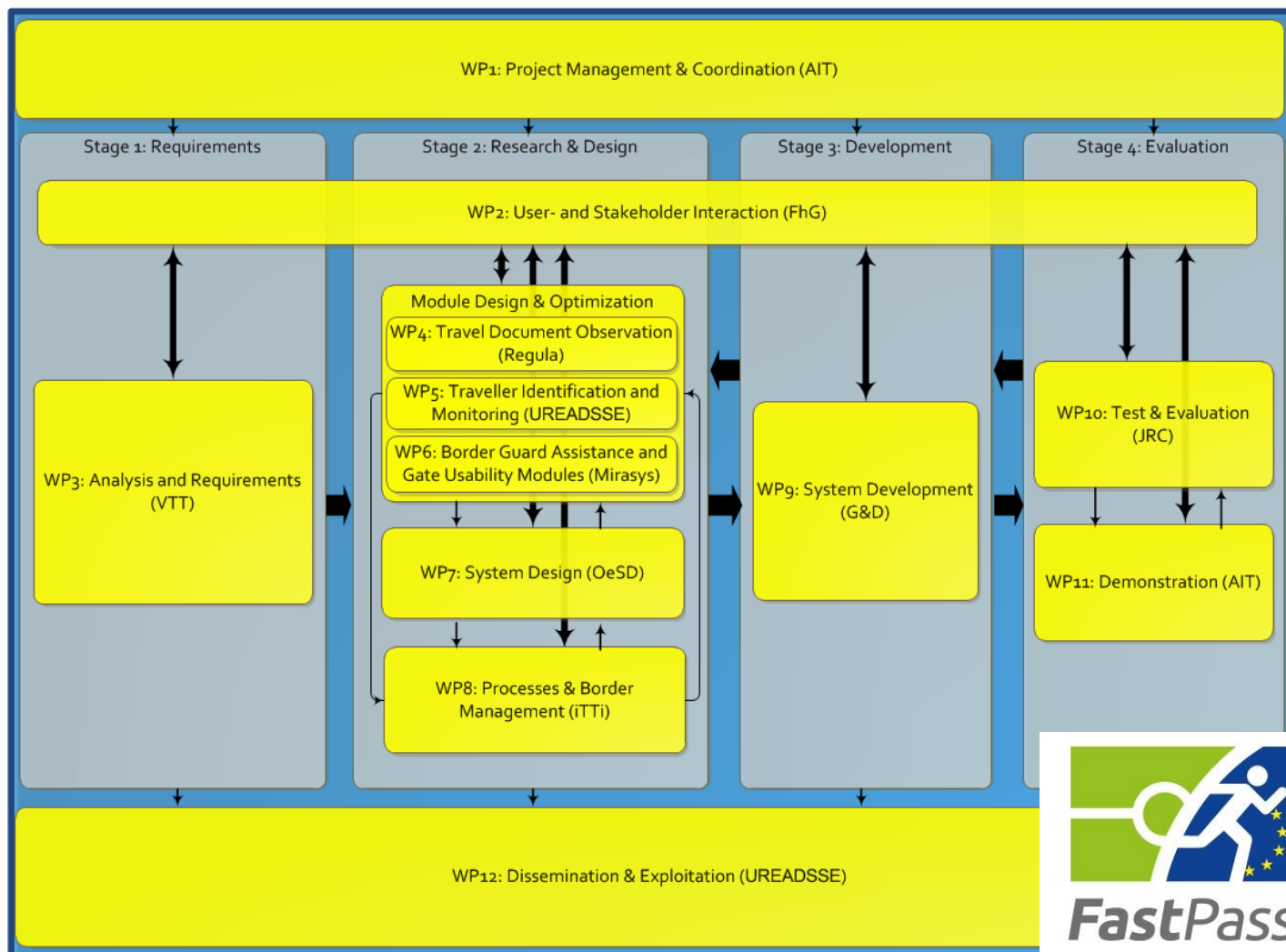


Science to solution – Expected outcome

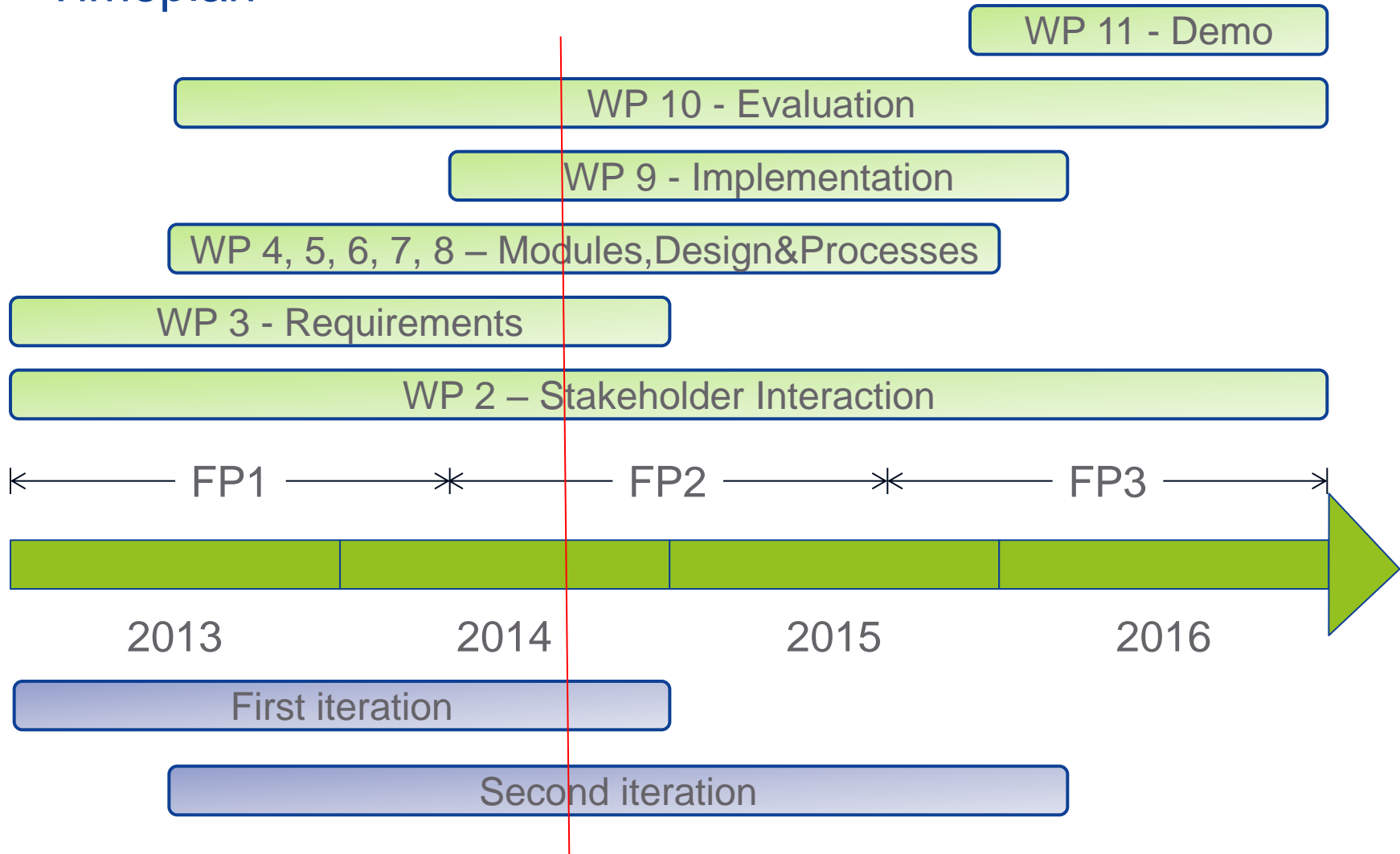


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Work package structure, deliverables and progress



Timeplan



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Timeplan Results

WP 10 – Evaluation

WP 9 – Implementa

WP 4, 5, 6, 7, 8 – Modules, Design & Processes

WP 3 – Requirements

WP 2 – Stakeholder Interaction



FP1



2013

2014

Document attack analysis

Stakeholder needs

Face spoofing

Set-up of user groups

Face recognition „on the fly“

Scenario description

Set-up of communication infrastructure

First Border Guard Module

Process Analysis

Kickoff Meeting Vienna

Requirements

First Designs (SW and HW)

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VIS and ABC systems

- ABCs for TCN: done or discussed in F, NL, G, UK
- Process issues:
 - Non-VIS: questions, stamping
 - VIS: checking of VIS, fingerprint verification, questions, stamping
- Possible solutions:
 - checking of VIS, fingerprint verification, questions
 - Kiosk based systems
 - stamping
 - EES (Smart borders)
 - NG Passports => see also the NewP@ss project

Innovations for current ABC systems

- Border guard user interface for better usability
- Advanced video surveillance modules
 - Queue length detection
 - Anomalous behaviour detection
 - Person separation
 - Left object detection
 - Dynamic passenger flow optimization
- Mirror based face capture unit for long distance capture while passenger moves
- Advanced passport inspection module
- Face spoofing detection

Next Generation Processes and Systems

- Demonstration for technologies in following advanced processes
 - sea border control with shared responsibilities between cruise-line operators and border guards to enable minimal border crossing time
 - control of passengers inside a car on land borders, with RTP like passenger and vehicle pre-registration
 - various processes on air borders such as face as token or RTP system with specific privacy preserving token
- Contribution to future processes
 - third country nationals transits and the possible inclusion into ABC process
 - clarifying open challenges of the smart border package (EES and RTP integration)
 - possible impacts and challenges of including VISA holders into ABC process
- Security and Risk Analysis with vulnerability list

FastPass – the system/technology, that

■ ...is secure

- Resistent
 - to latest attacks on document scanner,
 - to biometric spoofing
- Risk Assessment, Security Assessed by dedicated methodology

■ ...you like

- UI developed with extensive feedback from different European border guards
- Process and procedures developed with extensive evaluation from traveller groups
- Respects privacy and data protection (Data protection impact assessment – DPIA)

■ ...is harmonized – and shows new processes and scenarios

- ONE reference architecture serving many processes
- First European solution for cars at land border with ABC
- First solution for cruise ships
- Real comparison of different approaches

Thank You !

Contact information

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