



INTERNATIONAL CIVIL AVIATION ORGANIZATION



CASA DA MOEDA
DO BRASIL

ICAO Regional Seminar on MRTDs, Biometrics and Border Security

* 17 – 19 April 2012

Itamaraty Palace, Rio de Janeiro, Brazil

TITLE | The use of biometrics in Identity & Border Management:
a systemic approach

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Agency | Portuguese Immigration Service
Serviço de Estrangeiros e Fronteiras

Country | PORTUGAL

AGENDA

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- Focal Ideas
- A systemic approach
 - The enrolment
 - The deliverance
 - The control
- Needs & Challenges
- Conclusion
- Look ahead



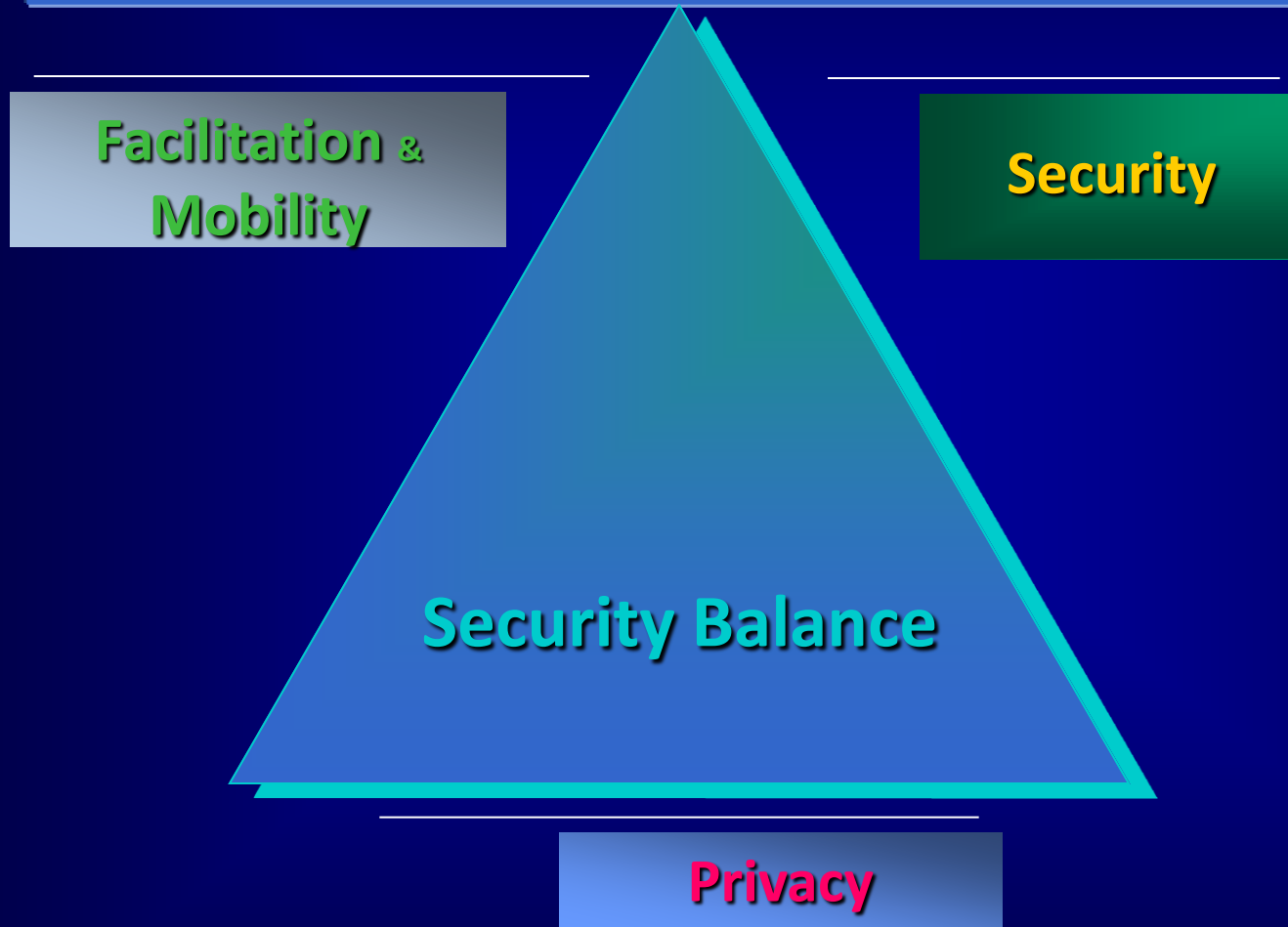
Key Factors to achieve

- Security Balance
- Identity Chain [processes]
- Trust Chain [security]
- Quality Assurance & Security Environment
- Standardization & Interoperability
- Citizens' proximity policy



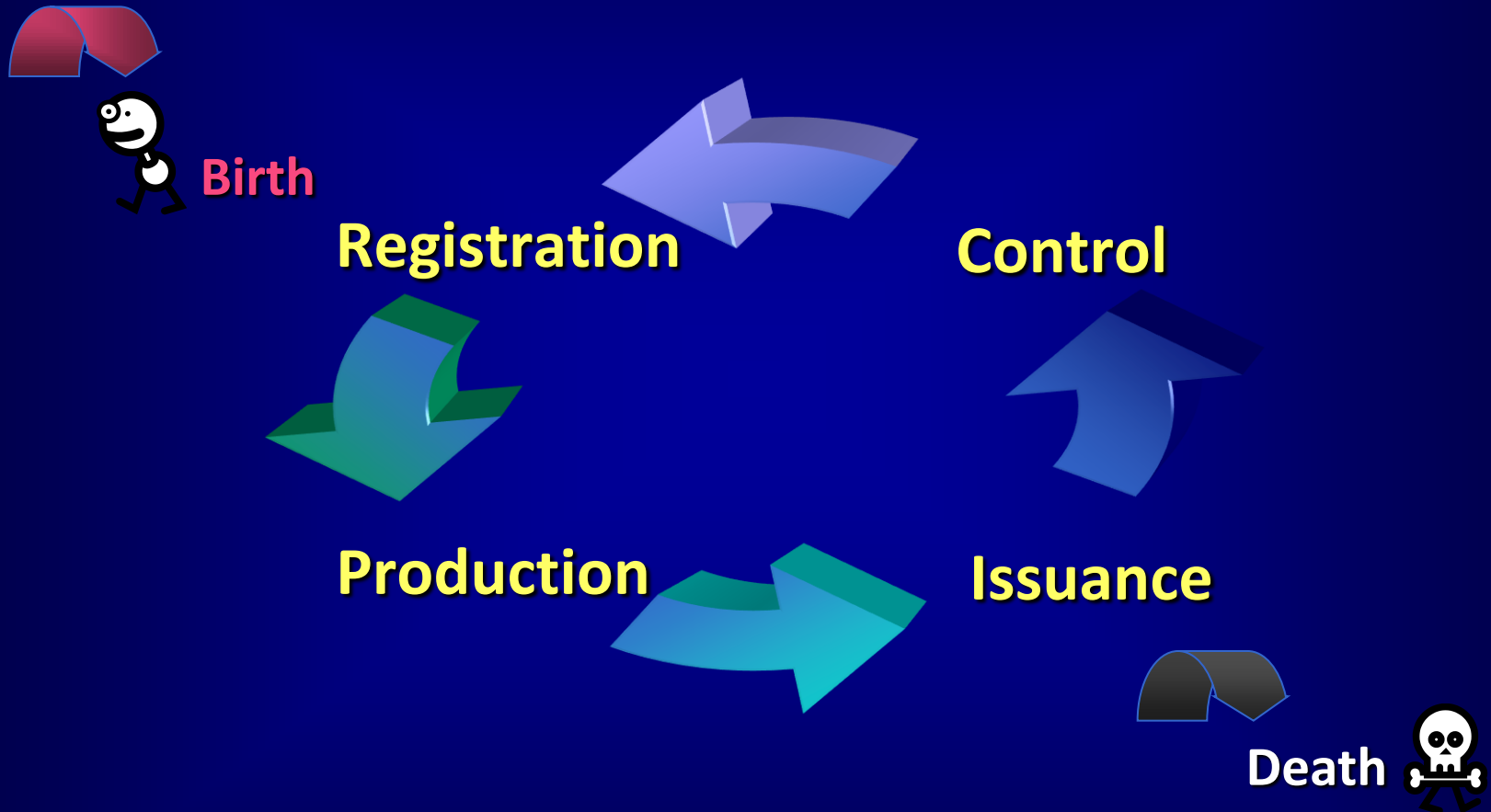
SECURITY BALANCE |

5 |



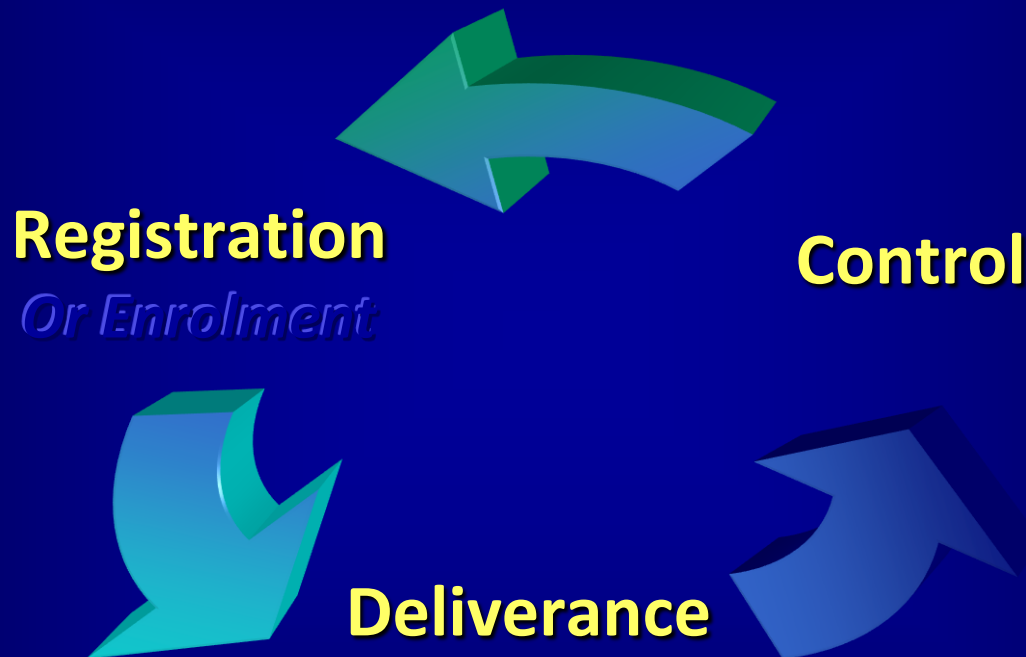
IDENTITY CHAIN |

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IDENTITY CHAIN |

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AGENDA

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- | Focal Ideas

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 - | The enrolment | Applicable to all documents

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Portuguese identity, travel and residence security documents make use of the same **live enrolment station** and IT architecture:

- Identity Card [ID]
- Portuguese Electronic Passport [PEP]
- Residence Permit [RP]
- Visas [refer to VIS]



Enrolment . Kiosk-PEP |

10 |

The Kiosk-PEP [**K-PEP**] performs live enrolment in about 400 different sites (in Portugal and Portuguese consulates) in a total of 470 Kiosks.



@ <http://www.pep.pt>





New versions



Enrolment . Mobile-PEP |

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The Mobile-PEP [M-PEP] performs standard live enrolment as the K-PEP.
It is used for exceptional situations.



AGENDA

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- Deliverance encompasses various phases, all centralized ensuring, therefore, high level of security and technical accuracy.
- Adequate quality control processes are performed alongside.
- Enhanced risk analysis can be achieved.



- **Production** | Manufacturing and assembling of the document;
- **Granting** | Decision making process with regards to the legal right of a person to a given document;
- **Personalization** | Customizing the document by infilling the bearer's personal data, making it unique and distinguishable. *Includes physical and logical personalization as well as dispatching.*



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I Certain physical security features, such as the ImagePerf™ (as a 3D security feature), depict an enhanced accuracy and prove better cost efficiency in centralized environments.

Physical personalization - laser engraving
in the case of the ID Card, passport and RP -
prove as well more consistency, quality
wide, allowing for enhanced matching
rates/reliability.

Logical personalization  face 2006
& fingerprints 2009 – shows several
advantages when centralized.



ePassport Deliverance . Granting process |

19 |

- Passport granting process became centralized in 23.SEP.2011 (six months ago).
- Collection of personal data is made decentralized in about 300 counters across the country.
- Standard cases (40%) are validated automatically, while the rest is manually checked. Worth mentioning are:
 - Temporarily or permanently incapacitated, eg. minors
 - Persons object of a police restraint order
 - Request for a second passport



Deliverance . ID & RP |

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With slightly different service levels to the citizen, the same applies both to the Identity Card and Residence Permit for third country nationals.

Ongoing process for other relevant documents, such as the diplomatic card or the EU citizens card.

ID



RP



AGENDA

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 - | **The control** | Securing facilitation & mobility

- | Needs & Challenges

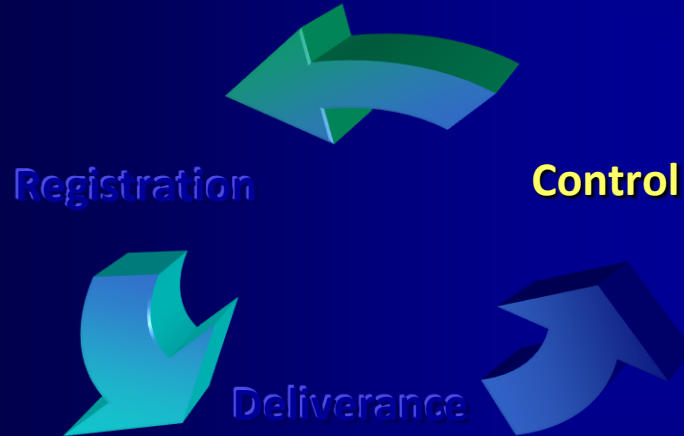
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CONTROL . Stationary & Mobile |

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STATIONARY

- ▣ **Standard control desks ||**
e-Readers with PASSE software
- ▣ **E-Gates ||**
RAPID system with biometric application for live detection & face recognition

MOBILE

- ▣ **Mobile control devices ||**
e-Readers with PASSE software for mobile environments

Small scale



| STATIONARY CONTROL |

eGates || RAPID



RAPID ▶ Automated Border Control for e-documented passengers

aka ABC System or e-Gates

It is an eye-monitored system which performs automatic checks on e-document, validating biometric parameters and checking the passenger's identity against relevant databases.

- It is** a fully interoperable system (ICAO standards)
- It is** a new and additional service for e-Passports holders
- It is** a simple, quick and user friendly process
- It is** a non pre requisites system – the e-Passport is the token



RAPID . Lisbon Airport | TERMINALS 1&2

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Terminal.1

Terminal.2



@ <http://rapid.sef.pt>



RAPID . Monitoring station |

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Medidas Cautelares: Gate 1

Erro de Autenticação do Documento
 FAILED - Known Doc
 FAILED - Trained Doc

Autenticações bem sucedidas

Dados do Documento:
 País: **UTO**
 Nº: **L601801C**
 Data de Emissão: **09.11.11**

Dados Biográficos:
 Apellido: **CORREIA**
 Nome: **BENTO**
 Nacionalidade: **TU**
 Data de Nascimento: **1967-4-11**
 Origem do Registo:

Medidas Cautelares (Pessoa)

Apellido	Nome	Nacionalidade	Data de Nascimento	Origem do Registo
CORREIA	BENTO	TU	1967-4-11	

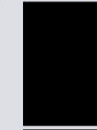
Gate 1 **ONLINE** Gate 2 **ONLINE** Gate 3 **ONLINE** Gate 4 **ONLINE** Gate 5 **ONLINE**

Gate 1: 
 Dados do Documento:
 País: **PRT**
 Nº: **VW0001**
 Data de Emissão: **14.02.11**
 Data de Validade: **14.02.11**
 Dados Biográficos:
 Apellido: **CORREIA**
 Nome: **BENTO**
 Data de Nascimento: **02.03.64**
 Sexo: **M**
 Nacionalidade: **PRT**

Gate 2: 
 Dados do Documento:
 País: **PRT**
 Nº: **GR00048**
 Data de Emissão: **26.04.15**
 Data de Validade: **26.04.15**
 Dados Biográficos:
 Apellido: **DAVIES**
 Nome: **ROGER**
 Data de Nascimento: **26.11.60**
 Sexo: **M**
 Nacionalidade: **M**

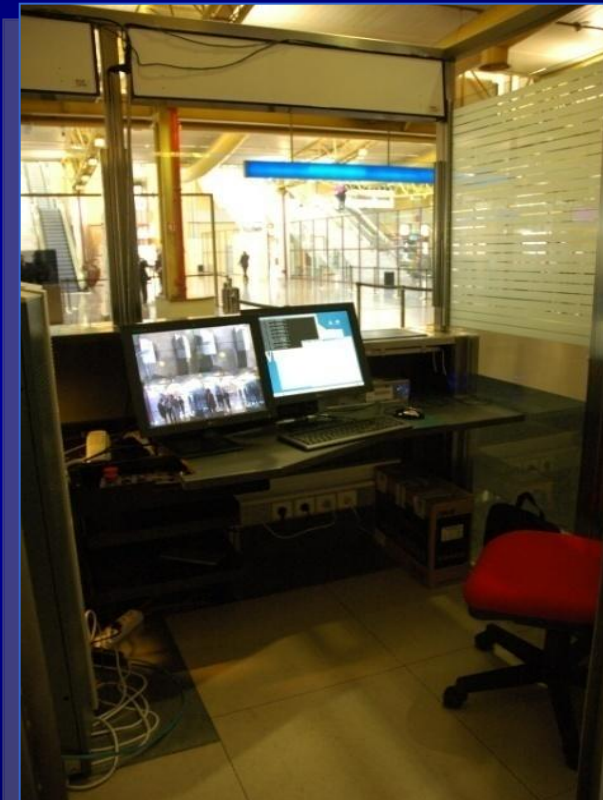
Gate 3: 
 Dados do Documento:
 País: **PRT**
 Nº: **IF04102**
 Data de Emissão: **24.06.09**
 Data de Validade: **24.06.09**
 Dados Biográficos:
 Apellido: **REIS**
 Nome: **RITA**
 Data de Nascimento: **25.03.78**
 Sexo: **F**
 Nacionalidade: **F**

Gate 4: 
 Dados do Documento:
 País: **PRT**
 Nº: **IF04102**
 Data de Emissão: **24.06.09**
 Data de Validade: **24.06.09**
 Dados Biográficos:
 Apellido: **REIS**
 Nome: **RITA**
 Data de Nascimento: **25.03.78**
 Sexo: **F**
 Nacionalidade: **F**

Gate 5: 
 Dados do Documento:
 País: **PRT**
 Nº: **IF04102**
 Data de Emissão: **24.06.09**
 Data de Validade: **24.06.09**
 Dados Biográficos:
 Apellido: **REIS**
 Nome: **RITA**
 Data de Nascimento: **25.03.78**
 Sexo: **F**
 Nacionalidade: **F**

Reconhecimento Manual
 Medidas Cautelares
 Controlo Manual Portas

21.05.2007 09:51:06: VBeGateServer: Gate 4 - 100.108.1.63 connected, server30.9



RAPID . Facts & Figures i. |

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Biometric Identifier
Token
Passengers checked
Police & Criminal Databases
Average Process time
Number of gates
Fee
Limitations/ Constraints

Face

e-Passport, no pre registration needed

Over 1 million per year

Yes, including INTERPOL DB

15,2 seconds

80 at all airports at entry/ transit/ exit

No

Only for EU passports & over 18 years

[PT legal constraints]



| MOBILE CONTROL |

Cell devices || SMILE



Cell Devices . Prototypes |

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DATASTRIP – DSVII-PA



PSION TEKLOGIX
WorkAbout PRO C



MaxID – BHC-100



VISOTEC MOBILE 100



Cell Devices . Functional requirements |

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The following provisos were considered:

- Reading
[*Optical characters; barcodes and contact & contactless chips*]
- Biometrics [*face and fingerprints matching*]
- Access to Databases [*several*]
- Communications & Security [*strong authentication*]
- Operability [*autonomy; lifespan; system response time; size environment; health care; screen parameters; weight; etc.*]



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- Need **4** citizens awareness
- Need **4** timely and accurate staff training
- Need **4** close **cooperation with all players** taking part in the ID & Trust Chain – PT initiative on a **National Plan for Identity**
- Need **4** **accurate systems' integration**, ie, back office solutions must be fully integrated, namely the access to relevant watch lists. – PT initiative on a **Platform for the Interoperability of Criminal Information Systems**





PNIDS | Plano Nacional de Identidade Segura
National Plan for Secure Identity

| What is it?

| Identity fraud and theft is nowadays faced as a global scale problem. It is generally regarded as the illegitimate obtaining and use of any third parties identities (in whole or in part), and /or documents attesting such identities.

| Although this is not a new issue, it has been recasting itself while registering an accelerated growth and building up its expansion potential. Globalization and technological evolution boosted the exploitation of the weaknesses of an increasingly complex management of identity.



PIIC | Plataforma para o Intercâmbio de Informação Criminal *Platform for the Interoperability of Criminal Information Systems*



Objective |

To ensure high security standards during exchange of criminal intelligence between police forces while conducting prevention and investigation actions.

Its target is to secure interoperability between the information systems of police forces involved in criminal investigation.



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CONCLUSION . Road map |

2006

Passport | PEP |

@ <http://www.pep.pt>

- | BAC Pilot 31JUL06
- | Full 28AGO06
- | EAC 17JUN09
- | SAC & EAC - upcoming

2007

Identity Card | ID |

@ <http://www.cartaodecidadao.pt/>

- | Full implementation 2009
- | Upgrades in-between

2007

VISAS (EU format)

- | BIODEV | Pilot projet 2007/2008 (finish)
- | VIS | OCT2011 (launching)

2007

e-Gates | RAPID |

@ <http://rapid.sef.pt>

- | Pilot 26APR07
- | Full implementation - JUN07-2009
- | Upgrades ongoing

2008

Residence Permit | eTR |

- | BAC Pilot - 22DEZ08
- | Full implementation - 03FEV09
- | EAC - May2012



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LOOK AHEAD . Roadmap |

- Kiosk updates
- PNID project

Registration

Control



Deliverance



Stationary solutions

- **RAPID** *for* bona fide, third country nationals (pre-registered) | **pilot 2012**
- **RAPID** *with* fingerprint live sensors | **2012**

- ID with contactless chip | **upcoming**
- **PASSPORT - PKD** | **2012**
- **PASSPORT - new model** | **2014**
- Several documents updates | **2012**
[Diplomats card, EU citizens Card, etc.]
- **PASSPORT & RP – SAC & EAC** security protocol | **upcoming**

Mobile solutions

- **SMILE** as a prototype solution. Dependent on **PIIC** (interoperable information platform) and **GTEM** national wg & **MOBIDIG** EU wg outcomes.

- **APIS** (advanced passenger information system) | **2012**



Credits & Ending

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Thank you 4 listening | Muito Obrigada
Comments || Questions

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IMMIGRATION Directorates

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