FRONTEX Research and Development Unit

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Frontex – Biometric based systems for Border Control

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Presentation overview

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1. General introduction of Frontex;
2. Role of Research and Development Unit;
3. Legal context of border control;
4. State of play at the border;
5. Future requirements.

1. General introduction of Frontex

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Frontex is the European Agency for the Management of the Operational Cooperation at the External Borders of the Member States of the European Union.

Frontex was created by the EU Council Regulation (EC) No 2007/2004 of 26 October 2004.

1. General introduction of Frontex

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Tasks of Frontex:

- carry out risk analyses;
- coordinate operational cooperation
    a) joint return operations
    b) assist with technical and operational assistance
- assist EU Member States with training of their Border Guards (Common Core Curriculum);
- follow up on developments in research relevant for the control and surveillance of external borders.

2. Role of Research and Development Unit

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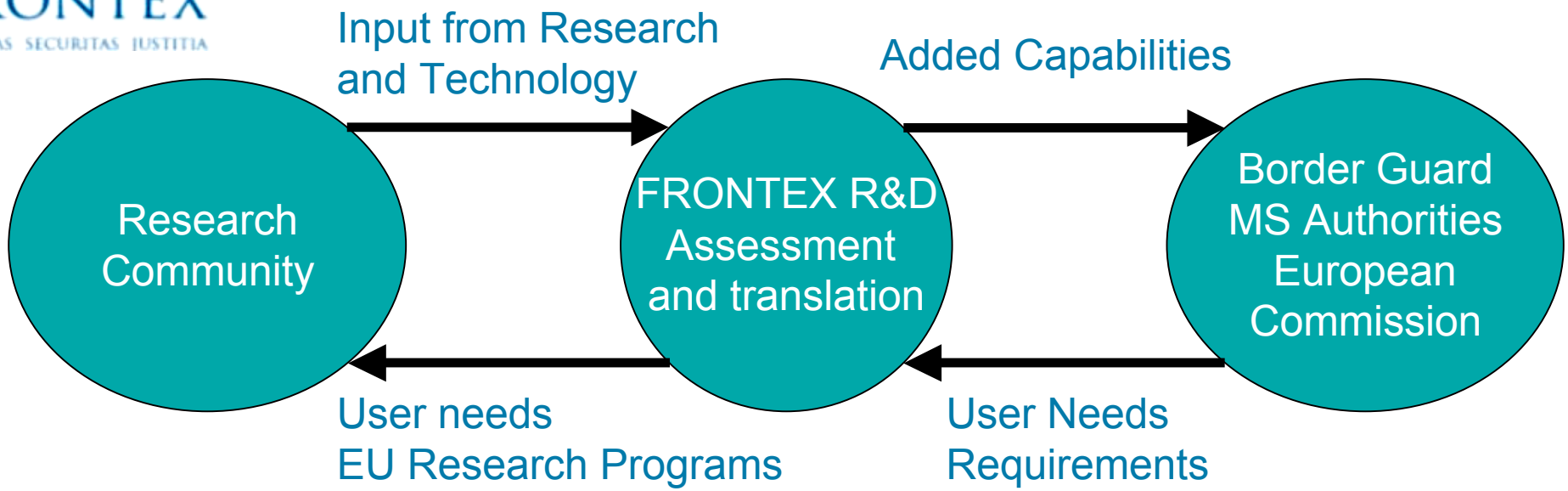
Mission:

"Follow up on developments in research relevant for the control and surveillance of external borders and disseminate this information to the European Commission and the EU Member States."

2. Role of Research and Development Unit



2. Role of Research and Development Unit

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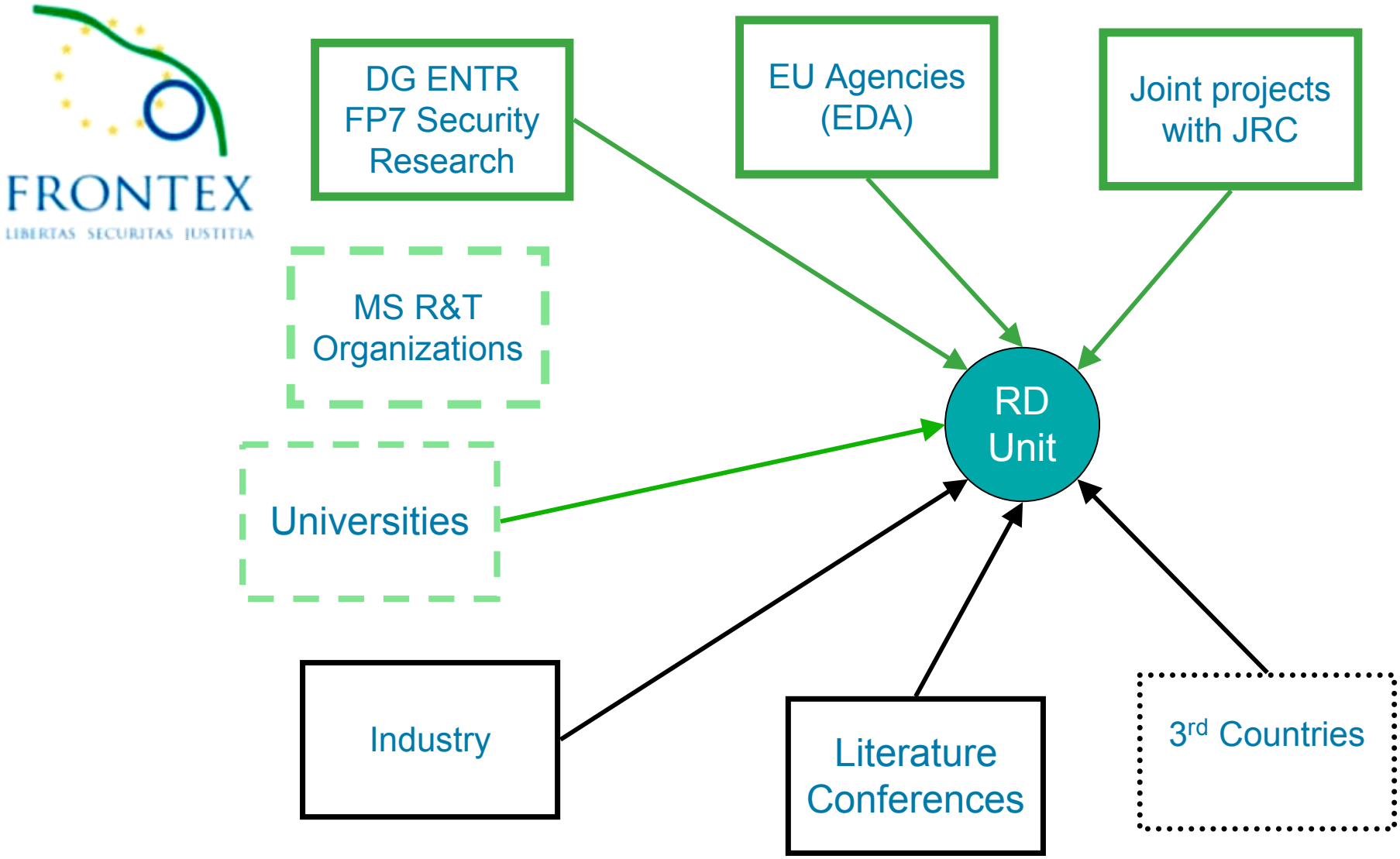
Key customers:

- European Commission DG JLS
  - European Border Surveillance System (EUROSUR)
  - Entry/exit system
  - European Security Research and Innovation Forum (ESRIF)

- EU Member States Border Guard Authorities

2. Role of Research and Development Unit



3. Legal context of border control

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Regulation (EC) No 562/2006 of 15 March 2006 also known as the Schengen Borders Code

Complicating factor:

- Not all EU Member States apply the Schengen Borders Code;
- Some non-EU Member States do.

3. Legal context of border control

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Different entry/exit border control requirements for different nationalities (EU nationals versus non EU nationals).

-> different role of biometrics in the border control process;

-> however, exemption is in the making for certain non EU nationals (RT schemes).

3. Legal context of border control

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- EU nationals: fully automated border control based on biometrics possible (Portuguese airports, CDG, AMS, FRA)

- non EU nationals: due to legal constraints fully automated border control at present not possible, but biometrics can support (and improve) the border control process (VIS)

4. State of play at the border

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BIOPASS study on biometrics based automated border crossing systems in use at CDG, AMS, FRA and LHR

- prove the concept of automated border crossing;
- intermediate step for the design of future systems.

Disadvantage of the systems:

- multiple registrations/prior enrolment;
- no interoperability.

4. State of play at the border

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Portuguese RAPID system:

- facial recognition based;
- passport is token, no prior enrolment;
- (basic) verification of authenticity travel document.

4. State of play at the border

Airport	Amsterdam Schiphol **PRIVIUM**	Frankfurt **ABG**	Paris Charles de Gaulle **PEGASE**	London Heathrow **IRIS**	Portugal **RAPID**
Biometrics	Iris	Iris	2 fingerprints	Iris	Facial image
Token	Contact smartcard	Passport	Contactless smartcard	None	E-Passport
Location of biodata	Smartcard	Database	Database	Database	E-Passport
Number of users	**36 000**	**20 900**	**10 000**	**80 000**	**83 000**
% of movement	**1.4**	**0.07**	**0.08**	**0.9**	-

5. Future requirements

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Cross road for Automated Border Control:

- prior enrolment v. no prior enrolment;
- limited user group v. open user group;
- autonomous solution v. integrated solution
  -> what biometric to use?

Different systems serve different purposes!

5. Future requirements

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Communication of the European Commission on new tools for an integrated European Border Management Strategy of 13 February 2008:

> “Access to automated gates can be given to those holding a biometric passport or, as an interim measure, a specific smart card issued upon individual application under the national schemes”.

5. Future requirements

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Key elements for future requirements for Automated Border Control systems:

- applicable to large groups of people (EU nationals holding electronic passport);
- interoperable (passports or one token without enrolment suits all);
- reliable (verification travel document authenticity and verification identity);

5. Future requirements

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For further consideration:

- vertical integration (e.g. Electronic Travel Authority, API/PNR);
- horizontal integration with systems in use by others (e.g. private parties):

-> access to Extended Access Control data on chip in e-passports to third parties (e.g. air carriers)?

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Thank you for your attention.

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