

INCERT GIE

Centralizing critical PKI infrastructures: Improving information security



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4 travel and secure eDocuments regulated by European Union (EU) institutions:

ePassport



- Technical and security requirements defined in **EU regulations**, which also refer to **ICAO Doc 9303 and supplement**.

Contactless chip mandatory with **biometric data** (facial image and fingerprints).

eResidence Permit



- Similar status than for the ePassport.

(e)Driving Licence



Technical and security requirements defined in **EU regulations**.

Contactless chip recommended.

eID card



Technical and security requirements defined in an **European Member States resolution** dated from 2006.

If used for **travelling**, it has to **comply** with **EU regulations** applied to **ePassports**.

3 IT infrastructures also regulated and 1 IT infrastructure recommended by European Union (EU) institutions:

Country Verifier Certification
Authority (CVCA)
Document Verifier Certification
Authority (DVCA)



Protecting and regulating the access to the sensitive data (e.g. fingerprints, social security number) of each issued eDocument.
Technical and security requirements defined in **EU regulations**, which also refer to **German standards**.

Single Point of Contact
(SPOC)



Managing the access requests from foreign countries to the fingerprints of the national ePassports and eResidence Permits.
Technical and security requirements defined in **EU regulations**, which also refer to a **Czech standard**.

National Public
Key Directory



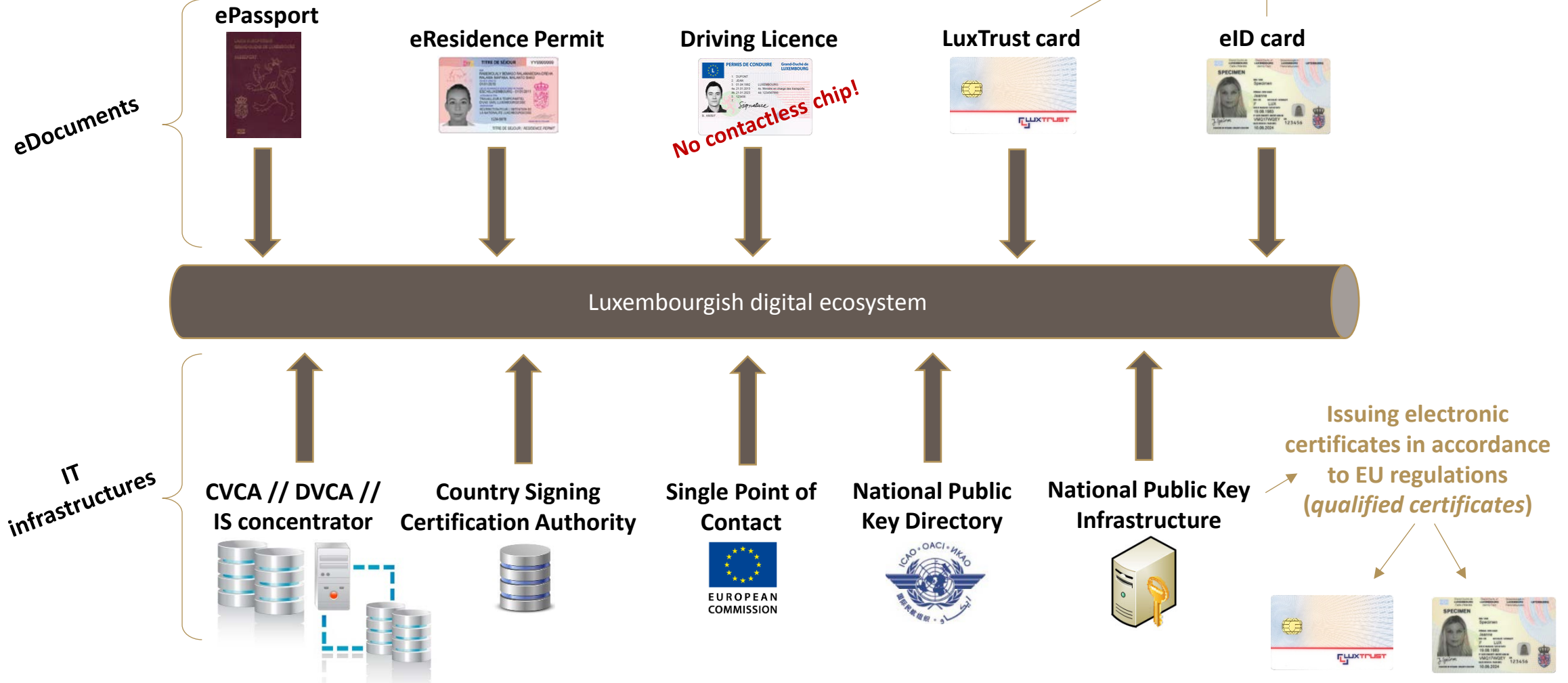
*Hosting a **trusted list** (published by the **ICAO Public Key Directory**) of **certificates** used by countries when signing ePassports data and making this list available to the Police and border control to enable them to verify the authenticity of ePassports issued by foreign countries.*
Recommended by EU commission to deploy...

2. The Luxembourgish digital ecosystem

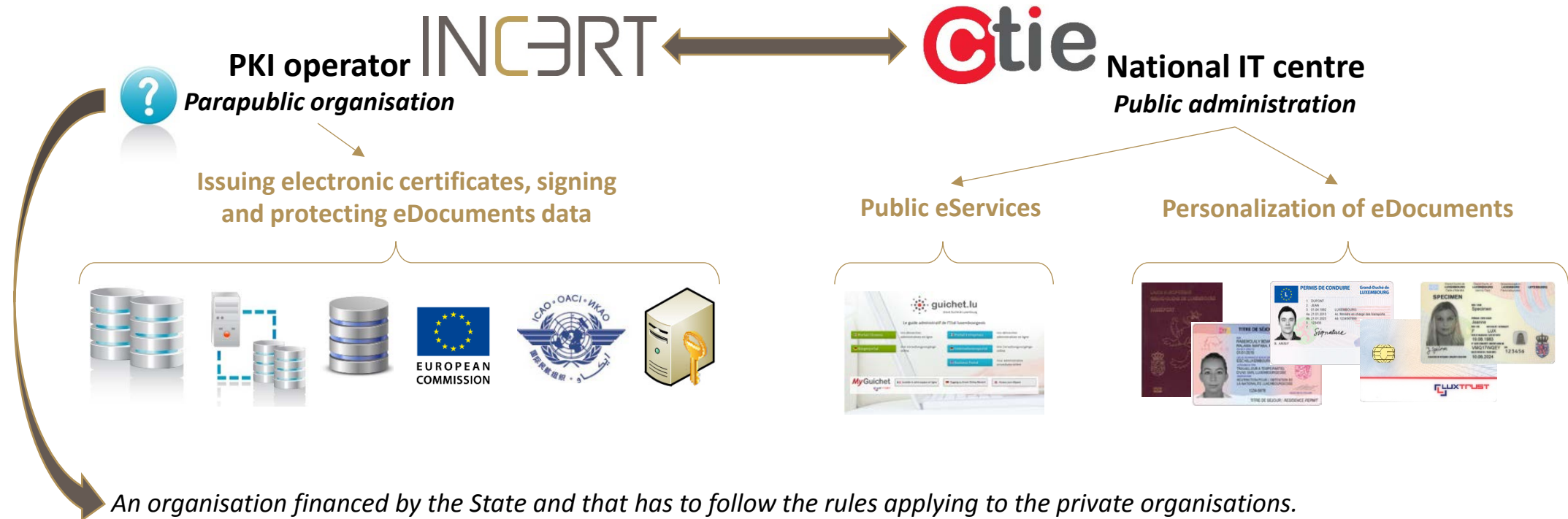
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The **Luxembourgish digital ecosystem** is composed of the following **eDocuments** and **IT infrastructures**:

Containing electronic certificates that are used for authentication and signature purposes



The Luxembourgish digital ecosystem is composed of the following 2 public key actors:



Main benefits for INCERT GIE with regard to its status:

- Simplification of its internal processes (e.g. procurement, human resources) // no obligation to follow the rules applying to public administrations.
- Adherence to the “Financial Service Provider” status for being able to provide services to the Luxembourgish financial sector // unworkable in practice for public administrations.



State of Luxembourg (approx. 98 %) and the Luxembourg Chamber of Commerce (approx. 2 %).

Shareholding

1. **Managing IT (PKI) infrastructures** on behalf of the State of Luxembourg.
2. **Assisting** Luxembourgish public administrations with regard to **travel and secure eDocuments** (ePassport, eResidence Permit and eID card).
3. **Representing Luxembourg** at international standardisation committees within **specific information security domains** (e.g. PKI, aviation security and cyber security).

Current roles

Created in January 2013, first **information security and operational objectives** of INCERT GIE were to:

- **Take over and handle existing IT infrastructures** (e.g. NPKI, ePassport PKI) now under its responsibility;
- **Design and deploy new ones** (e.g. SPOC, NPKD); and
- **Establish a comprehensive and pragmatic information security and operational strategy** for being able to adequately manage IT infrastructures.

Therefore, a management decision was made to implement an **Information Security Management System** in accordance to the **ISO/IEC 27001 standard**.

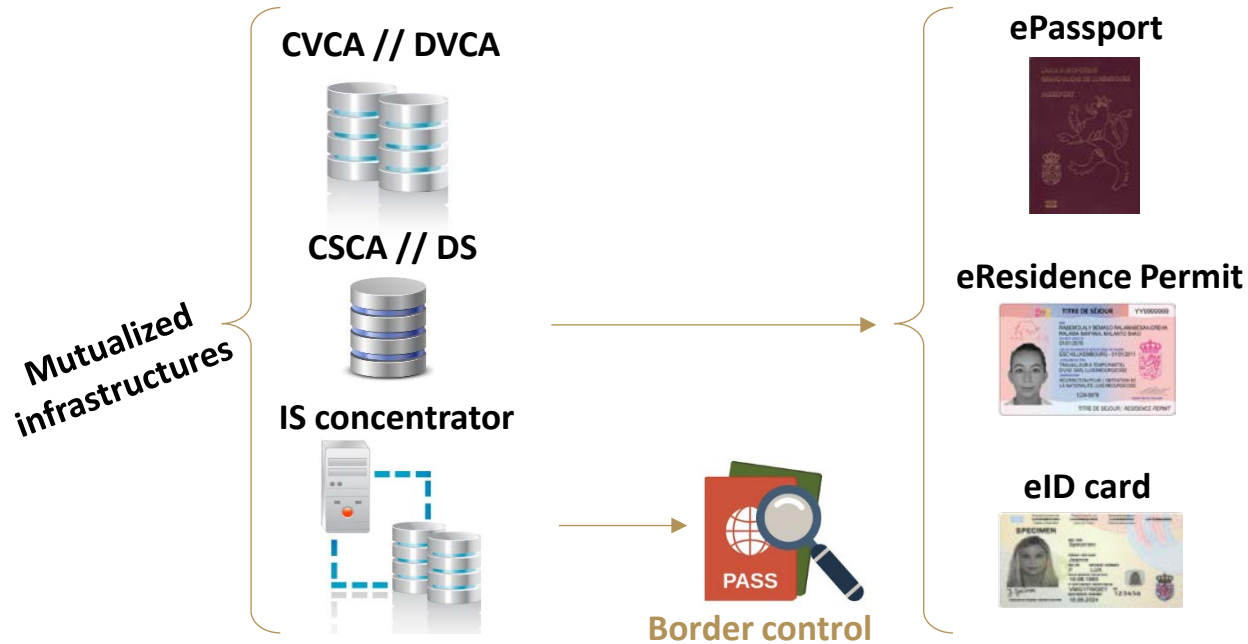
One year later (in January 2014), INCERT GIE has been certified against this standard for **all its business and internal activities**.

Information security strategy



INCERT

A unique centre of expertise in **PKI technology supporting travel and secure eDocuments**.



Main benefits for INCERT GIE with regard to the approach taken:

- Reducing applications and hardware cost (mutualization effect).
- Establishing a common information security and operational layer.
- Focusing on the real issues (i.e. security vulnerabilities, incidents, proactive changes).



Any questions ?

Benoit POLETTI

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