# Privacy Protection for Biometric Passports
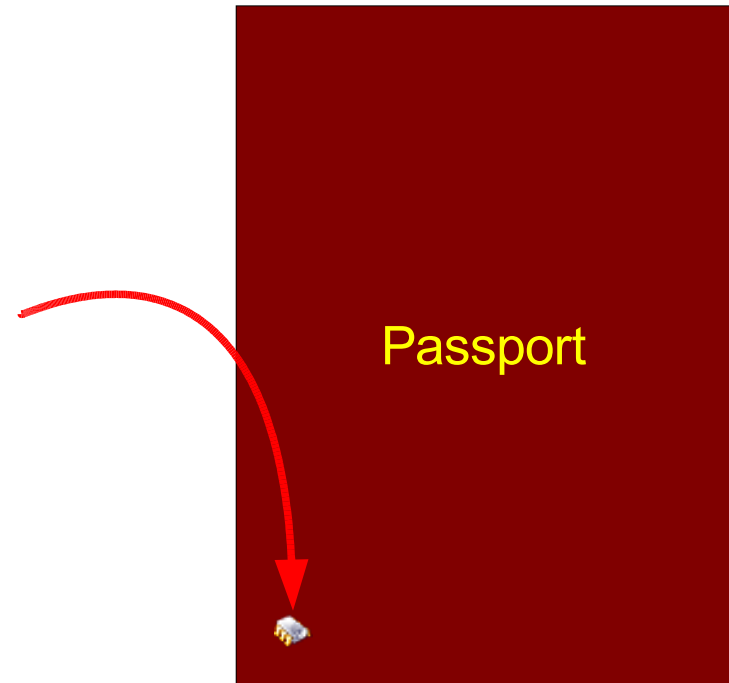
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## Federal Office for Information Security

Privacy Enhancing Technologies 2004, Rump Session

2004-05-27

# Biometric Passports...

- **Passport Document**
  - Machine Readable Zone
  - Physical Security
- **Electronic Passport**
  - Machine Readable Zone
  - Biometrics
    - Face, (Fingerprints, Iris)
  - Digitally Signed

Passport

# ... with Contactless Chips

- Chips are conforming to ISO 14443
  - Reading distance: <span style="color:green">few centimetres</span>
  - Eavesdropping (existing communication): <span style="color:red">several meters</span>
- Resulting problems
  - Privacy concerns
  - Identity theft (Face: "Almost Biometric Twins")
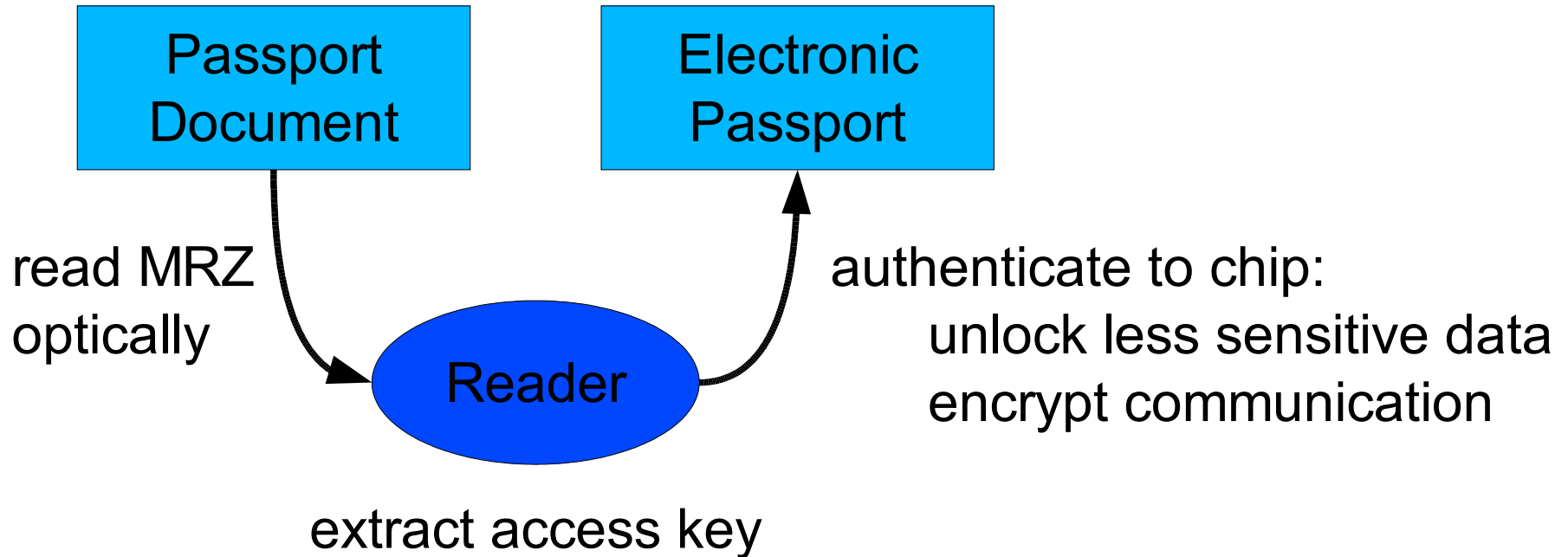  - Criminal investigation (Faked fingerprints)

# Access Control

- Electronic visa will contain two biometrics:
  - Face, MRZ (Less sensitive):
    - Can be obtained easily from other sources
    - *Basic Access Control*
  - Fingerprints (Sensitive):
    - More difficult to obtain from other sources at a large scale
    - *Extended Access Control*

# Basic Access Control

# Questions?

## Security in Pervasive Computing

Boppard, Germany, April 06-08, 2005

http://www.spc-conf.org