



REPUBLIC OF ESTONIA
INFORMATION SYSTEM AUTHORITY

National eID in Estonia: the key to the Digital Ecosystem

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Information System Authority (RIA)

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Responsible for:

- Central **e-government systems & architecture**
- Coordination of national **cyber security**
- **EU Structural Funds** for IT development



Estonia: basic e-facts

A map of Europe with Estonia highlighted in dark green. The rest of Europe is shown in light green, and the surrounding areas are in grey.

- Nationwide eID since 2002
- 95% of tax declarations submitted digitally
- I-voting since 2005 (8 nation-wide elections)
- eHealth, eSchool, ePolice..
 - 98% of medicines prescribed electronically
 - 90% of teachers, students, parents use eSchool
- **Population 1,3M = 1,2M active e-ID cards**
- **80 M digital signatures/ year**

Saving time: more than 1 week per capita

Kaart: <http://en.wikipedia.org/wiki/File:EU-Estonia.svg>

Estonian digital enablers



- Unfavorable geographic location
- Demographic challenges - high per capita cost of providing public services
- Trust & cooperation between stakeholders
- Systematic capacity building: Tiger Leap & Look@World projects
- Relatively high level of awareness
- Critical competences



National ID card

- Personal data file
- Certificate for authentication
- Certificate for digital signature

Compulsory for all residents

PIC: 'One person = one identity'



Use cases:

- Authentication
- Legally binding signature
- File encryption/decryption for secure delivery

Additional eID tokens

- Mobile-ID: SIM card based token (since 2007)
- Digi-ID: additional card for digital use only (since 2010)
- E-Residency card (since 2015)
- Digital stamp: eID for legal entity



Future?

- National eID will be increasingly dependent on developments in regional/global ecosystem
- Cooperation with global corporations (national eID vs. FB or Google account)
- Maintaining high levels of security for eID and mID

Main conclusions...

- eID is only as useful as the change it drives – saving time and money
- Success of eID relies on the ecosystem surrounding it
- eID and digital ecosystem cannot be limited to a single country



More information on Estonian eID

- ID-card overview

<https://e-estonia.com/component/electronic-id-card/>

- ID-card concept

http://www.id.ee/public/The_Estonian_ID_Card_and_Digital_Signature_Concept.pdf

- General information and documentation

<http://id.ee/?lang=en>

<https://sk.ee/en/useful/digitalsigning/>

http://eid.eesti.ee/index.php/EID_application_guide

<http://open-eid.github.io/>





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Thank You!

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