

e-ID – Estonian Success Story

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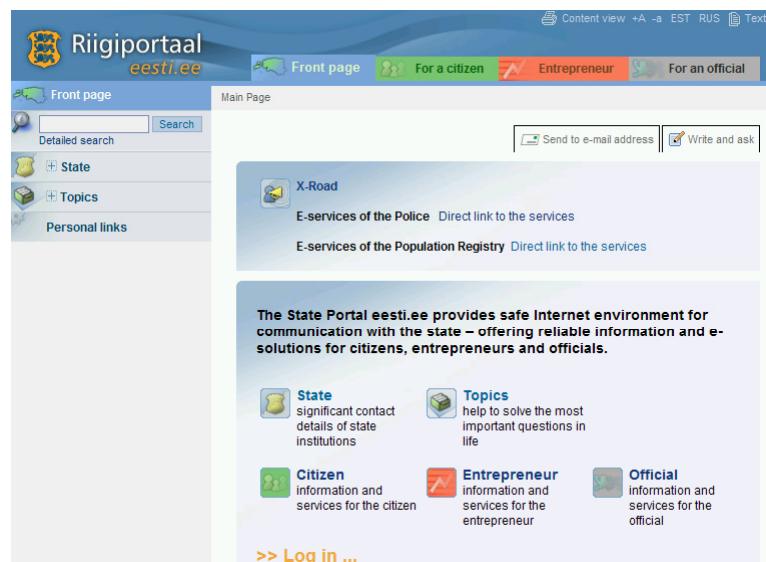
Estonia

Northeast Baltic country

- Area: 45 000 km²
- Population: 1,4 million
- 46% households have internet connection
- 800 000 internet users (65% of the population aged 6-74)
- 82% tax declarations are handled online
- ID-card and Mobiil-ID is used for login by 70 000 persons

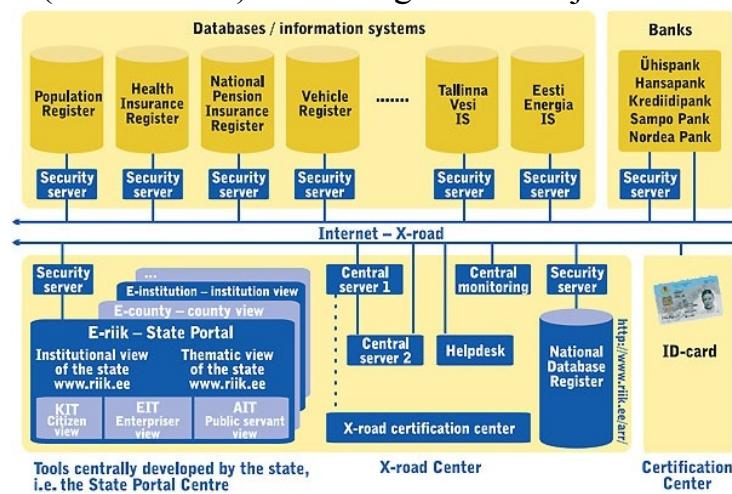
Gateway to e-state

<http://www.eesti.ee/eng/>



Basic's – X-Road or “Internet Highway”

connecting databases into a common public, service-rendering resource (started 2001). > 350 organizations joined.



X-tee: for citizen

“Show me information about me in peoples/business register”

“Show me information about my real-estate”

“Tell which vehicles I own currently”

“How is my child doing in school?”

“I’d like to apply for new passport, health insurance card etc, etc.”

And last...

“Tell me, who has accessed data concerning me lately”.

Logging into the portal

In order to use the services, the user needs to be authenticated with an ID card, with a mobile telephone or via Internet banking application.

By logging in, you will automatically accept the terms of usage of the state portal.



Logging in with your ID card

This requires that an ID card reader is connected to the computer and the relevant software is installed. This software connects the equipment and ensures the use of the ID card in various Internet environments requiring authentication. You can find information about setting up your computer on the page „Help with logging in”. You will also need to know the PIN1 code of your ID card.



Logging in with your Mobile ID

Mobile ID SIM card contains your mobile identity in addition to the usual functions of a SIM card – this mobile identity can be used by the Internet service providers for authenticating you. With Mobile ID, you can perform the same e-activities as with the ID card.

In order to log in via an Internet banking application, you will need to be a customer of an Internet banking application. The following banks offer the authentication service via Internet banking application: Swedbank, SEB Pank, Krediidipank, Sampo Pank, Nordea Pank. When logging in via an Internet banking application, you will be able to digitally sign only with an ID card.



Swedbank.ee



U-Net



Krediidipanga i-pank



Sampo Internet Bank

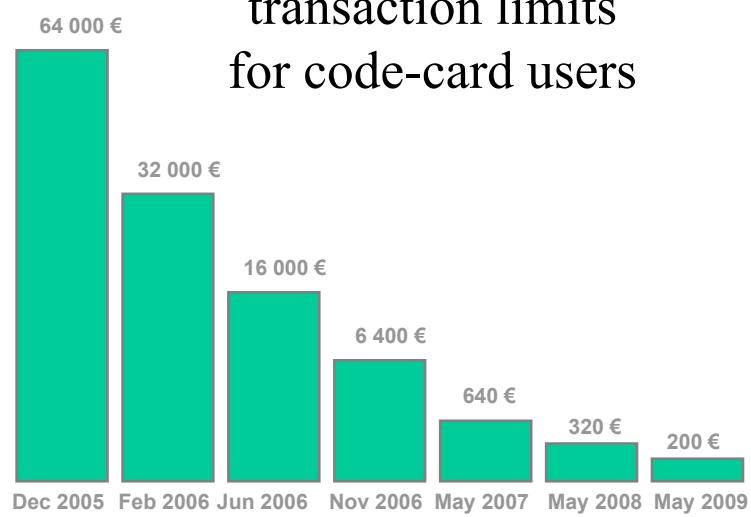


Nordea Solo Internet

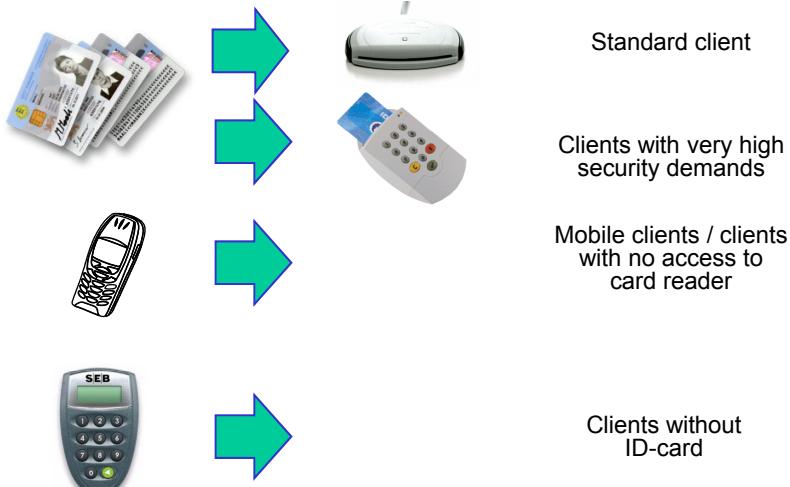
Authentication Mechanisms

- **Password cards**
 - Pro: cheap, easy to use,
 - Contra: usable only for one service, insecure - easy to copy.
- **PIN-calculators**
 - Pro: higher security level, easy to use,
 - Contra: price tag, usable only for one service, user needs to carry it
- **ID-card**
 - Pro: highest security level, legally digital signature, usable with different service providers
 - Contra: need for a smart card reader and specific software, no similar ID-cards in other countries
- **Mobile-ID**

Banks decreased the daily transaction limits for code-card users



Authentication portfolio in the future



More than 1 000 000 ID-card issued

- Personal Data File
 - Copies the visual information
 - Can be read without any restriction
 - Certificate for Identification
 - Identification in different infosystems
 - Signing and encrypting of e-mails
name.surname@eesti.ee
 - Certificate for Digital Signatures
 - No limitations in the scope of use
 - Equivalent to hand written signatures



Seisuga 11.05.2009 22:11
 Aktivseld kaarte: 1059564
 Antud digalkirju: 14637730
 Elektroonilisi kütuvastust: 26068540

Sertifitseerimiskeskus >
 Arvutikaitse >

Search EST RUS

ID-Card Mobiil-ID Areas of Use Software For Developers ID-Project Support

Mobiil-ID
 Mobiil-ID is a key to the future in your mobile telephone!

Personal Identification and Authentication with a Mobile Telephone

In addition to functionality of an ordinary SIM, a Mobiil-ID SIM also holds your mobile identity that enables providers of internet services to identify you and lets you give digital signatures.

Mobiil-ID enables you to make electronic transactions, just like an ID-card: it makes it possible for you to log into internet banks and sign various contracts digitally.

Prior to use, a Mobiil-ID must be activated. You can do so [here](#) (for an Estonian ID-card holders only).

MOBII aktiveerimine

The certificates of Mobiil-ID are valid for a period of five years, after which the SIM should be replaced.

Personal identification and digital signature functionality are secured by up-to-date security technology and corresponding Personal Identification Numbers (PIN). What makes the solution more convenient is the fact that you no longer need an ID-card reader in your computer - instead, you can access your internet bank from any available computer. A mobile telephone acts as a card and a card reader at the same time.

[View Mobiil-ID clip!](#)

<http://www.id.ee/10995>

Welcome to U-Net

You can conclude a U-Net agreement at the nearest SEB Eesti Uhispank branch office, where you will get the passwords required for the use of the service.
 If you are a customer of U-Net, please enter your username.

Username

Mobile-ID

Code: 8150

Please check that you see the same number in your mobile phone screen.
 Enter Mobiil-ID PIN 1.

Waiting for an answer.. 72

My menu Payments Queries Contracts E-services Investor Main page

Welcome, Ragnar Toomsa

New messages (1):
 18.04.2002 Re: U-Net tilihõttamine

You have 2 new e-mails

Submitted and uncompleted applications

Application	Loan amount / Credit limit Status	Change / Delete
Overdraft	1001 Ready for signing View / Digital signature	
Overdraft	1002 Ready for signing View / Digital signature	

Account balance

Current accounts	Account balance	Reserved	Available funds
Eurokonta	0,00	0,00	0,00

Most popular e-Services - e-Banking, e-Taxes, e-School

eKool

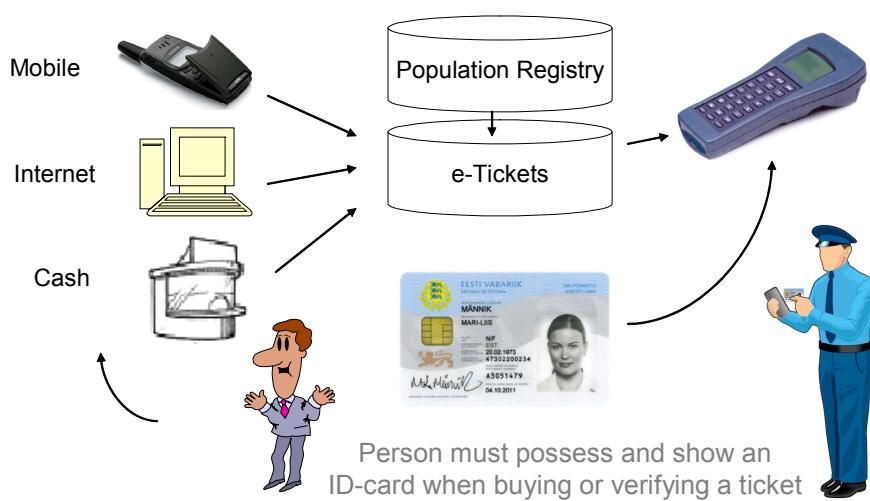
AIN JÄRÜ 38819178217

Tuludekslaation Alkaan tuludekslaation

unet

SK

ID-card-based payment and control systems



ID-card is just a secure token for different purposes

You present your ID-card and your status is checked against the appropriate databases:

e-Police
e-Health
e-Student
e-Client
...



whatever the person is entitled to

upon it one can build different services



eVoting – 2007 elections to the Parliament



Estonia is the first country in the World allowing for Internet-voting:

- country-wide,
- without prior registration,
- with binding results;

**30,275
e-voters
in 2007**



e - voting

7 june – European Parliament

The screenshot shows the homepage of the Vabariigi Valimiskomisjon (Estonian Central Electoral Commission) for the European Parliament election. The top navigation bar includes the logo of the Central Electoral Commission, the text "Vabariigi Valimiskomisjon", and language links "EST" and "RUS". The main content area features a blue sidebar on the left with links for "Elections and E-Voting", "Voting on the Internet" (with sub-links for Windows, Linux, and Mac OS X users), and "FAQ". A central column contains text about the election taking place on June 7, 2009, and a link to try out electronic voting from May 4 to 17. It also includes instructions for using an ID-card and contact information for assistance. A blue button labeled "HAÄLETA SIIN" is visible. At the bottom, there is a note about calling 1777 if the ID-card does not work.

Elections to the European Parliament will take place on 7 June 2009. E-voting will be available on this web-page from 28 May to 3 June 2009.

You can try out electronic voting on this web-page from May 4 to 17.

Make sure that your ID-card is in the chip card reader and you have the PIN1 and PIN2 codes at hand. If yes, then click the button "Vote here" (I lääleta siin).

If the ID-card will not function, in this case call 1777.
If some other technical problem does not allow e-voting, assistance is available from abi@valimised.ee
Additional information about elections is available from vall@riigikogu.ee.

http://www.valimised.ee/index_eng.html

SK (Sertifitseerimiskeskus AS)

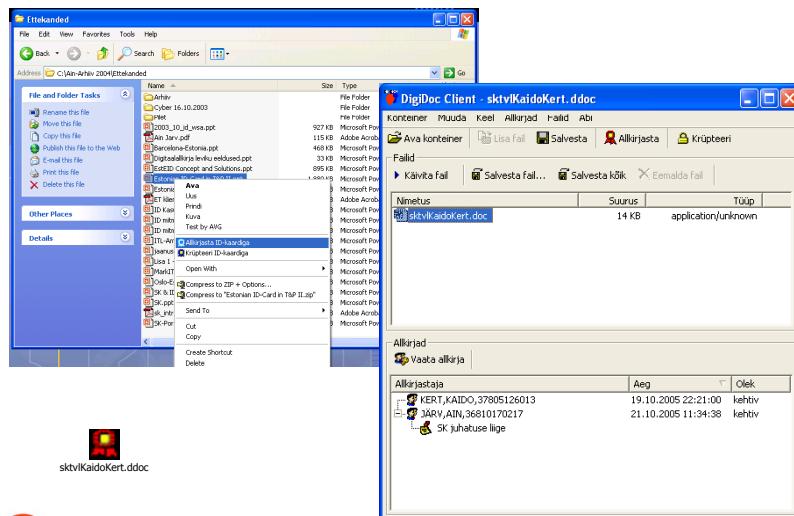
SK was established as a Certification Centre of Estonia in February 2001 by two leading Estonian banks Hansapank and SEB and two telecom companies Elion and EMT.

Today SK fields of activities are:

- A) Certification and timestamping services
- B) PKI technology and applications
- C) ID-card-based payment and control systems
- D) Management of Look@World Foundation



Digital signing of a document



Example cases

- **Riik.ee**
 - Citizens data queries
- **SEB.ee**
 - Payments
 - Digitally signed reports
 - Gateway to other partners
- **Pilet.ee**
 - Lets buy some e-tickets using phone
- **e-school**



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<http://www.eestipank.info/frontpage/en/>

<http://www.pangalit.ee/eng/>