

Developing the Estonian e-voting project: **m-voting**



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m-voting ?



- The same old Internet voting...
 - ...but using Mobile-ID instead of ID-card for authentication and digital signing
- The voter still needs an Internet-connected computer
- M-voting is not about voting by using mobile phone only

Electronic ID-s vary in form



- ID card (smartcard)
 - Mandatory ID document
 - Enabler for authentication and digital signatures
 - Needs smart card reader & software
 - Support for selected web browsers

- Mobile ID (SIM card)
 - Enabler for authentication and digital signatures
 - No need for software installation
 - Doesn't need web browser support
 - No physical identification possible



Getting Mobile-ID



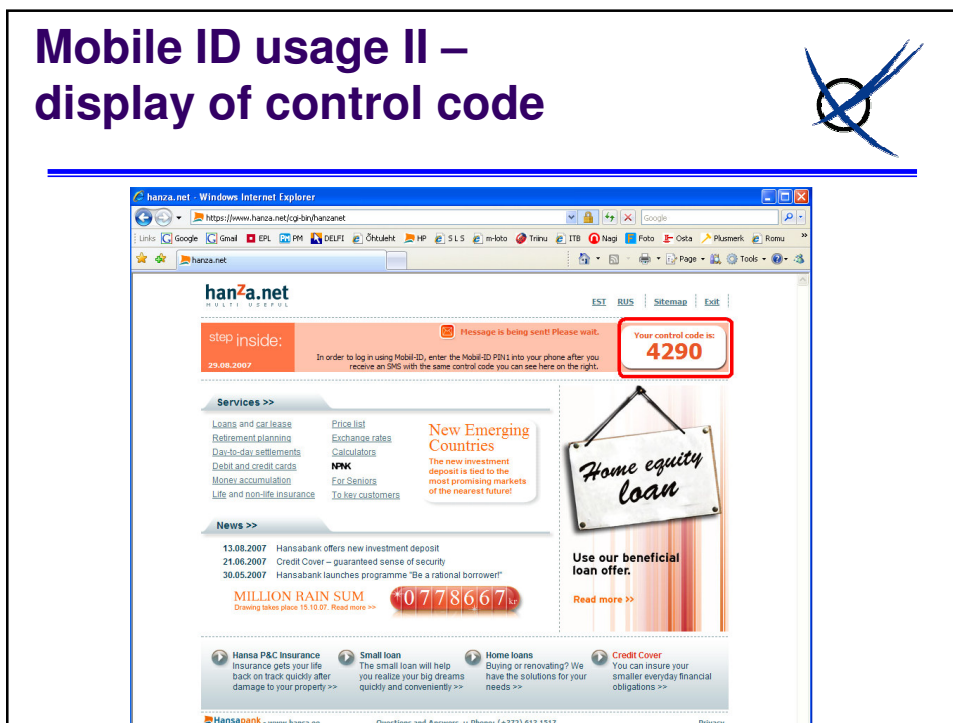
- Mobile-ID is available from Q2 2007 for EMT subscribers (not pre-paid)
- To use Mobile-ID, it is necessary to change the SIM card
- Customer gets the Mobile ID PIN1, PIN2 and PUK codes with the SIM card
- Customer activates his/her Mobile-ID by using ID-card



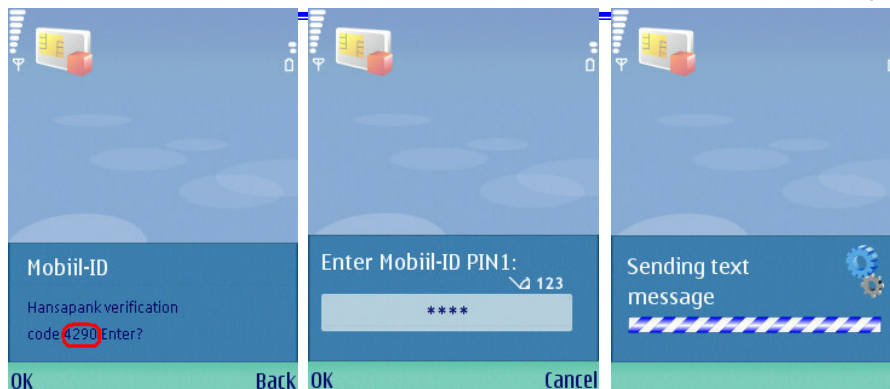
Mobile ID usage I – first step



Mobile ID usage II – display of control code



Mobile ID usage III – verify and enter PIN on mobile

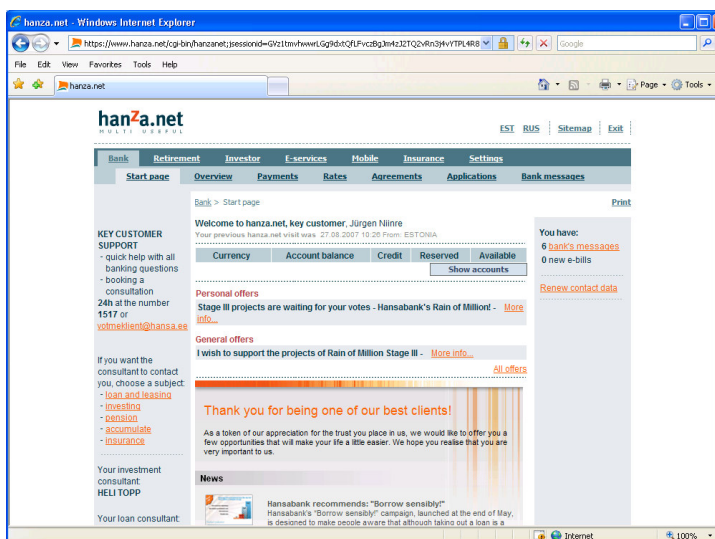


Check verification code

Enter Mobile ID PIN1

Sending message

Mobile ID usage IV – logged in



Mobile ID SIM - appearance



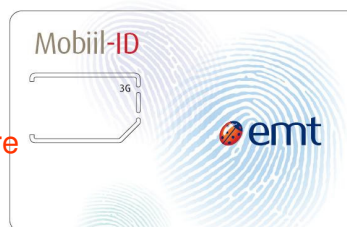
The following information must be communicated to the customer on standard SIM card:

- PIN, PIN2, PUK, PUK2

With Mobile ID you have to communicate also Mobile ID codes, for example:

- PIN1 (authentication)
- PIN2 (signing)
- PUK – unblocking

The Mobile ID PIN and PUK codes are secret so these must be covered under scratch panel or security foil!



Using Mobile-ID for I-voting



- Security analysis of the Mobile-ID is under way
- Comparative analysis with ID-card:
 - Different chip
 - Different issuance scheme
 - Different usage model
- Results to be expected in 2 weeks

Considerations



- Different aspects shall be considered in decision whether to use Mobile-ID in i-voting:
 - Security
 - The analysis shall provide answers
 - Equal access
 - Just one operator is in the market right now
 - Penetration
 - Today: ~10 000 Mobile-ID owners with ~4500 activated
 - Desire for novelty
 - Perhaps we are too liberal already ?

Thank you!



mobiil.id.ee
www.vvk.ee
www.valimised.ee