



E-stonia: Pioneering Public e-Services

Lecture 3 of course 'The innovative Estonia'

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The beginnings

- Clean sheet in 1991
- Widespread adoption of ICT – schools, public access points
- Internet access as a social right



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Indicators

- Entire country is covered with a broadband
- 99,8 % of bank transfers are performed electronically
- 98% of income tax declarations made via the e-Tax Board
- Over 30% of votes were cast over the internet in 2015
- 98% of medications is bought with a digital prescription

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Some achievements

- 2000: Launch of e-Tax Board
- 2000: Launch of m-Parking
- 2003: Launch of ID bus ticket
- 2005: i-Voting was introduced
- 2007: Launch of e-Police system
- 2008: Launch of e-Health system
- 2010: Launch of e-Prescription
- 2013: X-Road Europe introduced
- 2013: Online Border-Crossing System
- 2014: e-Residency

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National ID Card

- Digital name:
 - 38101222744
- Introduction in 2002
- Compulsory
- Contains certificates



National ID card application

- Secure log-in / prove identity (PIN1)
- Digital signatures (PIN2)
- Mobile ID
- NFC chip



Services

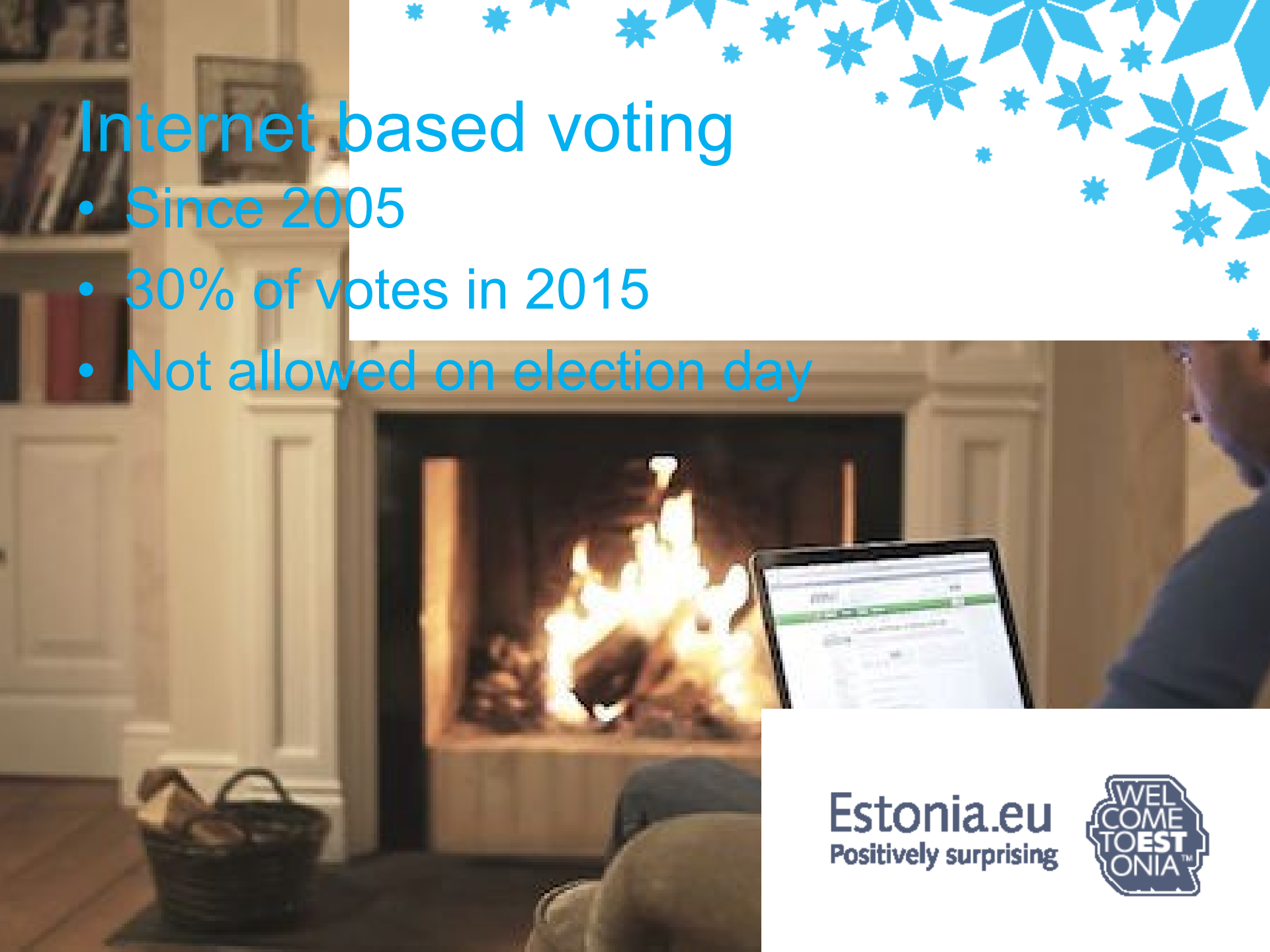
- E-services portal: eesti.ee
- E-tax
- Setting up a business
- National databases
- E-health (health record, prescriptions)
- E-school
- etc...

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Internet based voting

- Since 2005
- 30% of votes in 2015
- Not allowed on election day



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E-residency

- Since 2014
- More than 9000 e-residents
- 10 million by 2025?
- Development of services - 'app-store'



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E-residents can

- Digitally sign documents and contracts
- Verify the authenticity of signed documents
- Encrypt and transmit documents securely.
- Establish an Estonian company online within a day.
- Administer the company from anywhere in the world.
- Conduct e-banking and remote money transfers.
- Access online payment service providers
- Declare Estonian taxes online

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The future

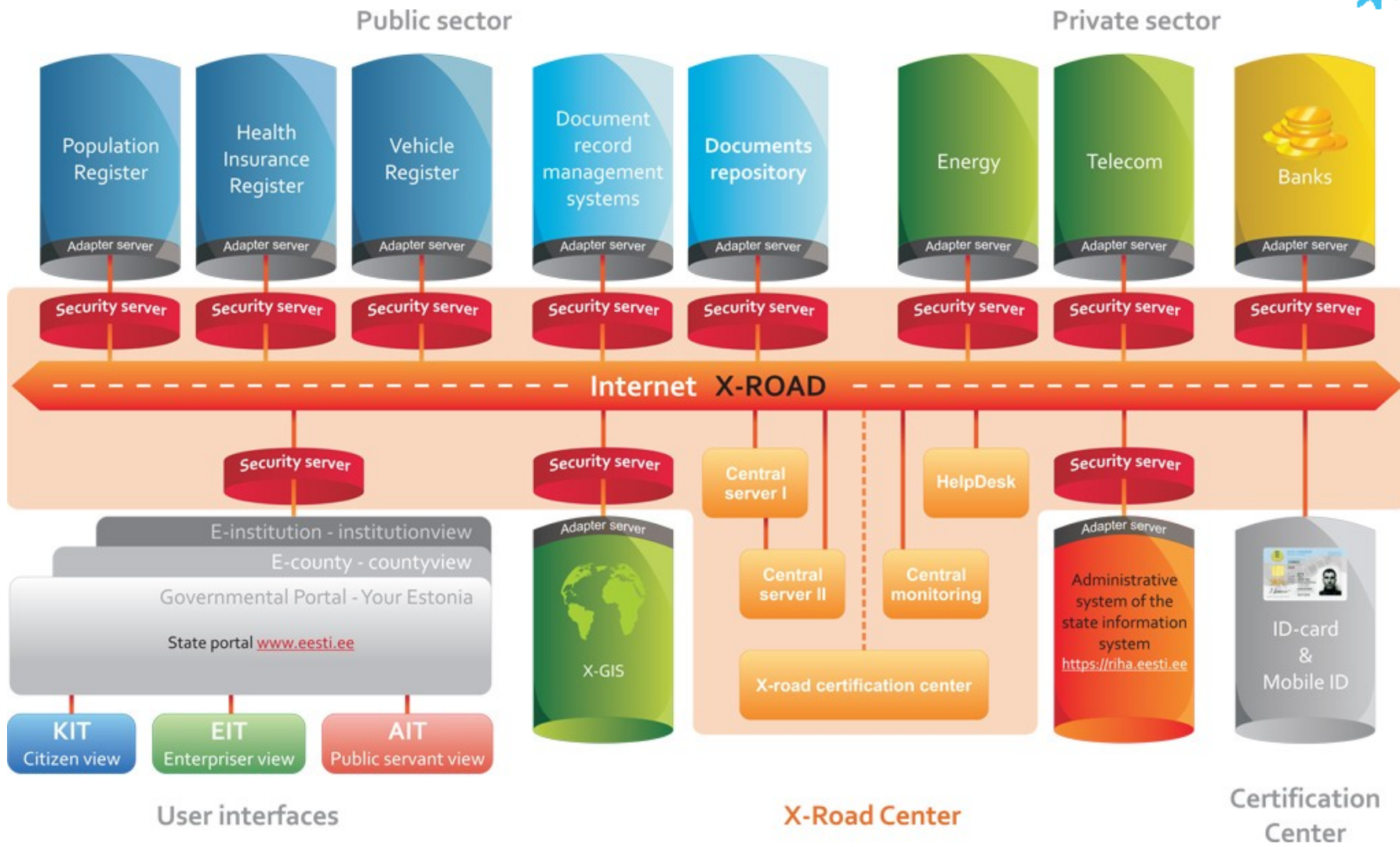
- Cross-border services
- EU standard
- Invisible government
- Data embassies
- Open data



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X-road



Security

- Encryption
- Transparency
- Trust



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Cyber security

- Bronze night in 2007
- NATO Cooperative Cyber Defence Centre of Excellence



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