

about the country

+ population: 1.3 million

+ area: 45,339 km2

+ currency: Euro

+ member of: EU, NATO, OECD, Digital Nations

+ ICT sector employees: 5,9% of workforce





three pillars of e-governance

Confidentiality

e-Identification:
ID-card, mobile-ID
Smart-ID, e-residency card

Availability

X-Road® E-services

Int<u>ea</u>rity

KSI blockchain Data Embassy

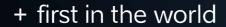
electronic ID

- + electronic ID is compulsory
- + 64% use ID-card regularly
- + 19% people use mobile-ID
- + 44% use smart-ID
- + 89,000+ e-Residents



e-residency

e-resident.gov.ee



- + 160+ countries
- + 90,000+ e-residents to date
- + 21,000+ e-resident companies
- + 31m+ € taxes paid to Estonia





- + The revenue of the project
- + Weaknesses in control systems
- + No obligation for foreigners to contribute
- + Risk of reputational damage to Estonia
- + Available services
- + Low number of renewed digital IDs

Confidentiality

e-Identification: ID-card, mobile-ID Smart-ID, e-residency card

Availability

X-Road® E-services

Int<u>eg</u>rity

KSI blockchain Data Embassy

x-road

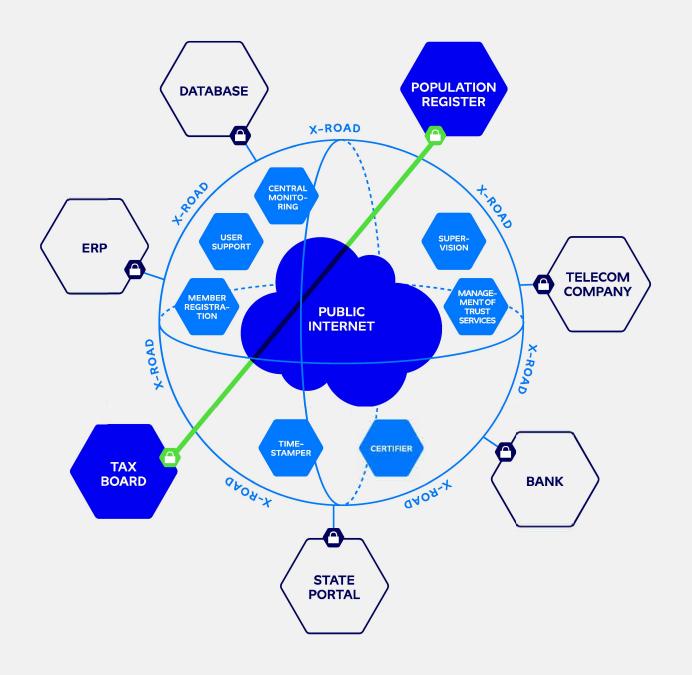
the busiest highway since 2001

X-Road — secure and interoperable open-source data exchange platform

+ operational in Azerbaidjan, Argentina, Cambodia, Colombia, El Salvador, Estonia, Faroe Islands, Finland, Germany, Iceland, Japan, Kyrgyzstan, Vietnam

X-tee — the Estonian X-Road ecosystem since 2001

- + saving 3 million working hours annually
- + over 3,000 different services
- + over 2,5 billion transactions per year





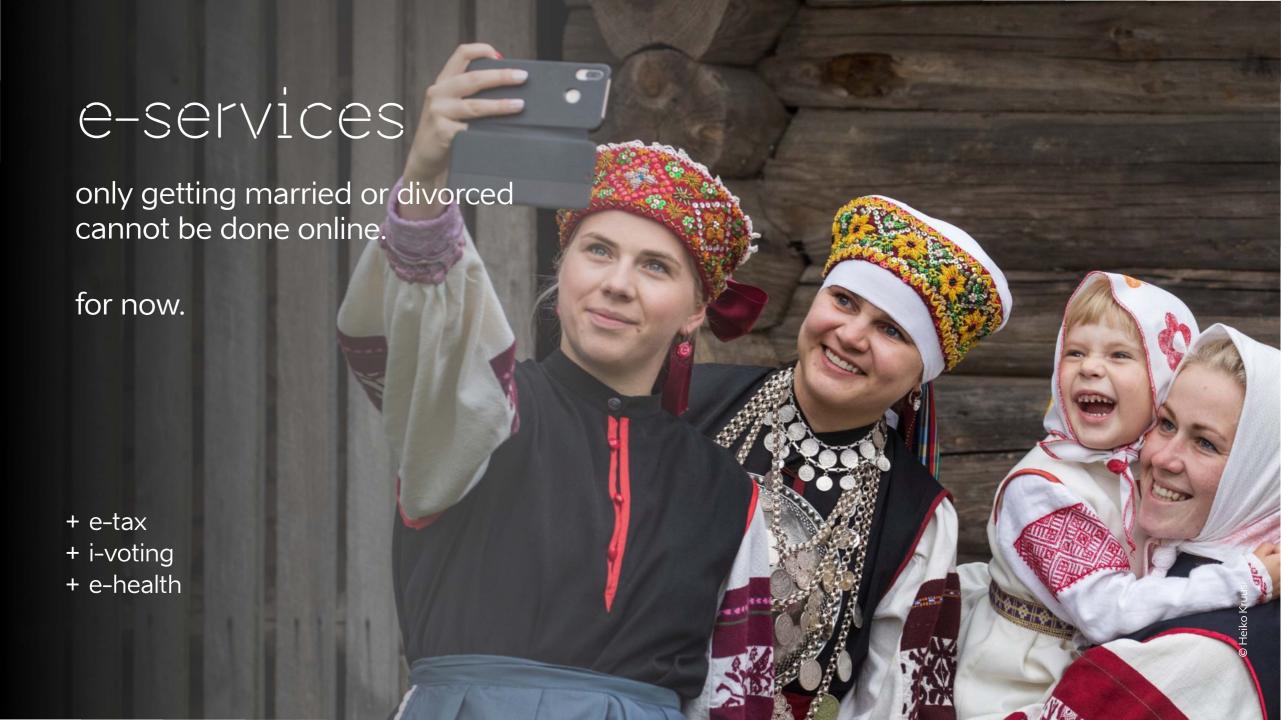
digital government

fast decision making

+ digital-minded leadership

- + once-only principle
- + e-state digital by default
- + 99% of services are online









- + Universal requirements for e-services
- + "The e-State Charter Everyone's rights in e-state"
- + Updated requirements in 2018

proactive government



starting a business



childbirth



buying a car



driving licence



start of school



unemployment & job search



marriage



divorce



disability



military service



change of residence



retirement



death (succession)



building houses



falling victim to an accident



falling victim to a crime

Confidentiality

e-Identification: ID-card, mobile-ID Smart-ID, e-residency card

Availability

X-Road® E-services

Integrity

KSI blockchain Data Embassy

data embassy

digital continuity of Estonia as a state

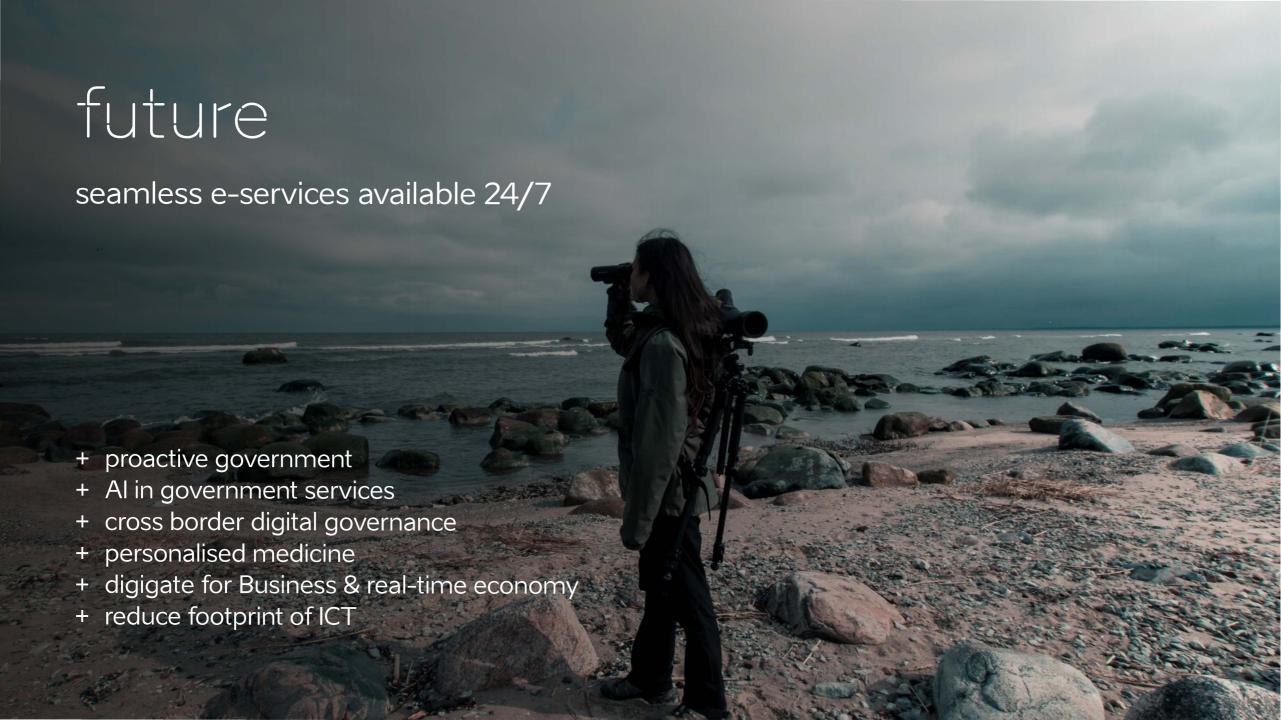
- + first data embassy in Luxembourg
- + strategically important datasets
- + highest level of security
- + future: additional locations



Ensuring the security and preservation of Estonian national databases of critical importance 2018

- + Some deficiencies of information security
- + No action plan or requirements
- + No additional information security rules
- + The implementation and audits of ISKE
- + Absence of some important information security measures





stronger together

Reports and summaries:

https://www.riigikontroll.ee/

Alo Lääne alo.laane@riigikontroll.ee