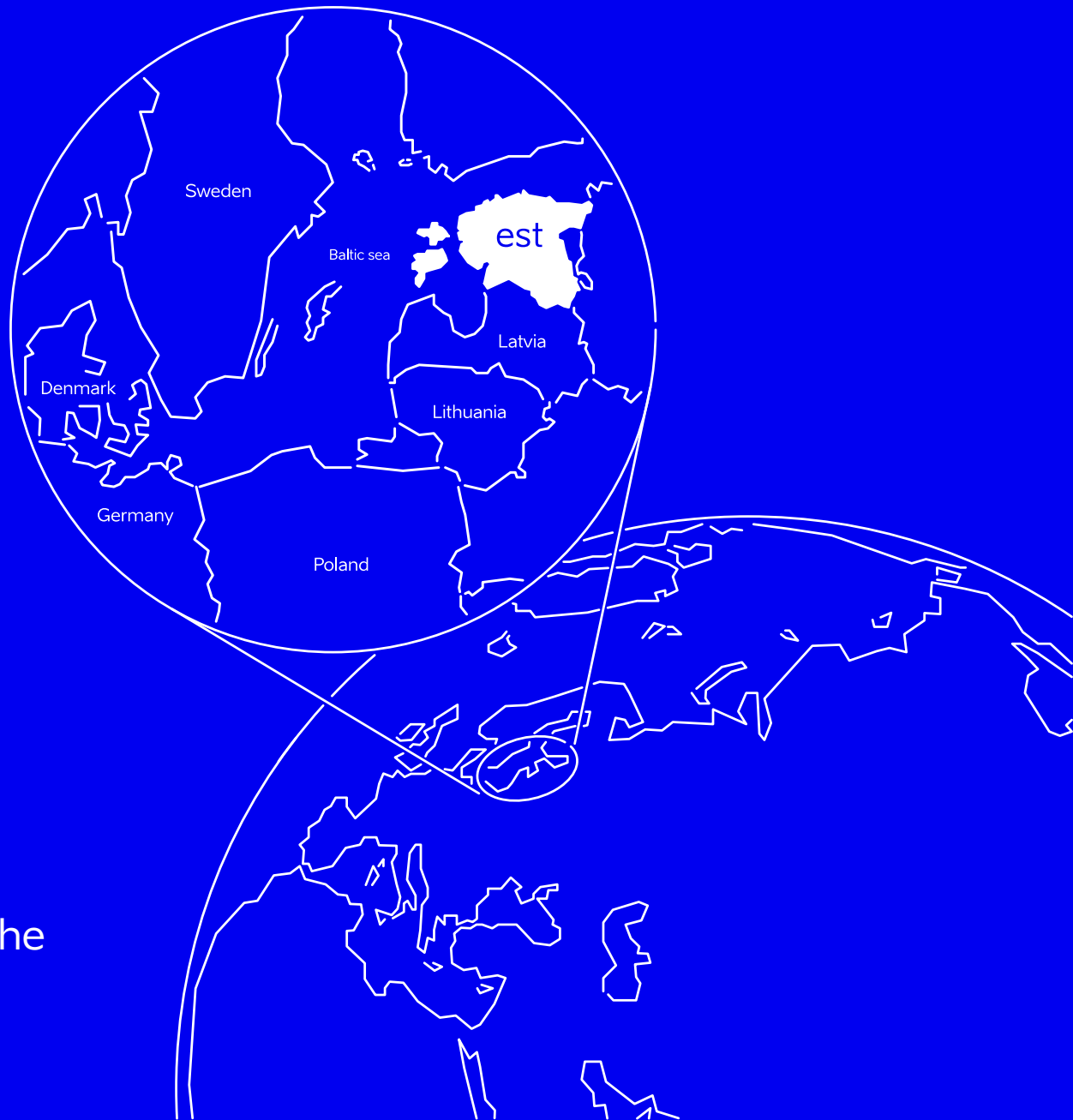
e-Estonia: beyond digital

The coolest digital society



A modest country

Extending beyond its borders



+ Population: 1.3 million
+ Area: 45,339 km2
+ Currency: Euro
+ Member of: UN, EU, NATO, OECD, CERN
+ Employees in the ICT sector contribute to 11% of the GDP

Essential

Clear and honest principles

+ Digital-minded leadership
+ Citizen-centric
+ Government institutions and roles
+ e-democracy
+ Public-private partnership
+ Education
+ Cybersecurity
+ Interoperability
+ Legal framework



Government tech institutions



CIO 1

Digital government



CIO 2

Technology, cybersecurity, connectivity

Ministry of Justice and Digital Affairs

Information System Authority (RIA)

GOVTECH ESTONIA

+ Ministry of Justice and Digital Affairs
+ Ministry of Education and Research
+ Ministry of Climate
+ Ministry of Regional Affairs and Agriculture

01.01.2027

TEHIK

Ministry of Social Affairs

RMIT

Ministry of Finance

SMIT

Ministry of Interior

Business owners + private sector service providers

Digital governance

Fastest decision making



© Aron Urb

+ Digital-minded leadership
+ Centralised coordination
+ Decentralised implementation
+ Transparent and effective
+ No vendor-locking
+ Data protection
+ No digital divide

Digital-minded leadership



Political readiness

Citizen-centric
Fostering cross-sectoral collaboration



Civil servants

Taking initiative
No traditional career model for life



Citizens

Showing the benefits
Raising awareness
Enabling opt-in

Legislation principles

- Risk of over-regulating
- Existing or new law
- Data ownership and protection
- Electronic identification as a prerequisite
- Connectivity
- Technology as a tool

Identification laws

Information society

Supportive regulation

IT financing

Ministry of Justice and Digital Affairs

€1.2 B

Digital Agenda 2030

222 M (SF 2021-27)

72 M (RRF 2021-25)

EU Funds

ministry coordinates division of budget across the state

Ministry of Finance

€30 M (2022)

Additional state budget

Expert evaluation for additional resources

all ministries

Strategic funds

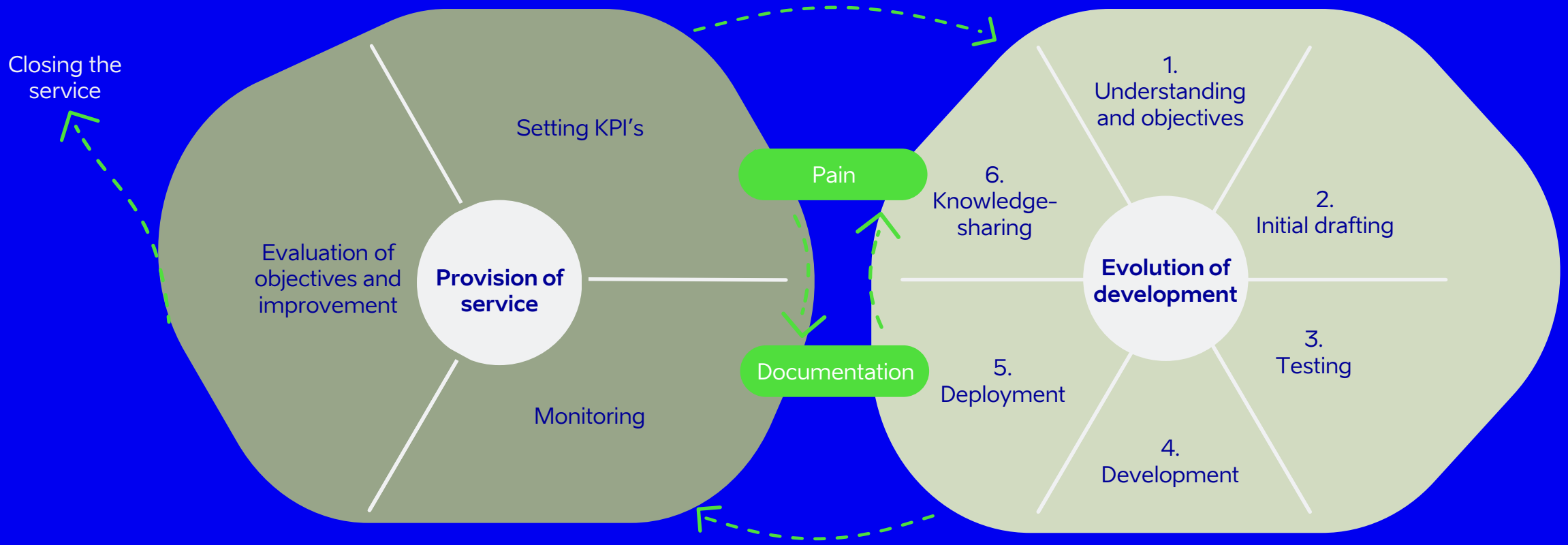
Fairest funding for innovation



- + Corresponding with the agenda and strategy
- + Measurable
- + Sustainable
- + Capability to carry out
- + Compliance with preconditions

© ERM - Anu Ansu

Evolution of digital public services



Electronic ID

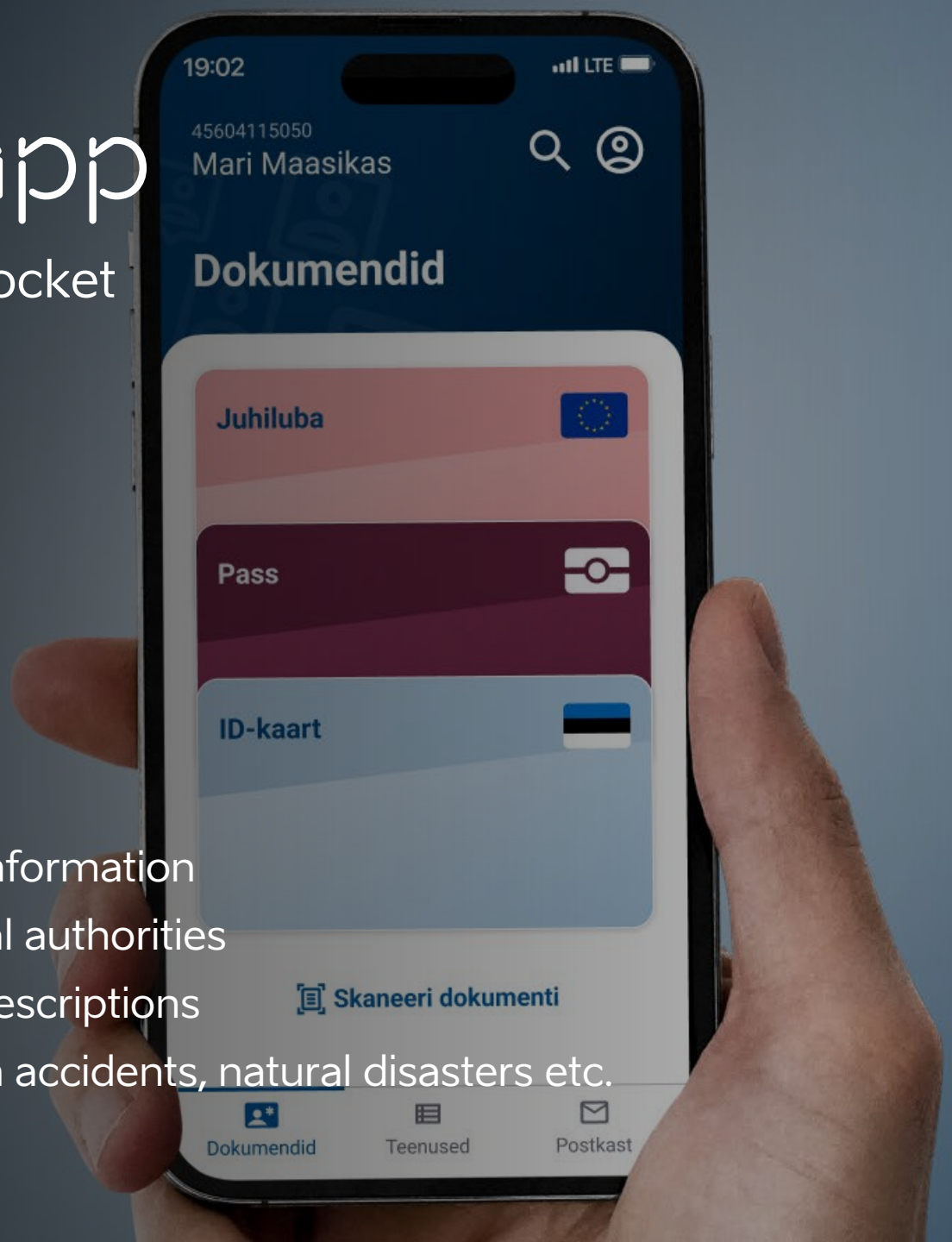
The strongest identity since 2002



+ Electronic ID is compulsory
+ 64% use ID-card regularly
+ 19% people use mobile-ID
+ 53% use smart-ID
+ 142 000+ e-residents

eesti.ee app

Digital state in your pocket



- \+ Access your personal information
- \+ Communicate with local authorities
- \+ View and manage e-prescriptions
- \+ Receive notifications on accidents, natural disasters etc.
- \+ Use the data tracker

Potential substitute to physical documents

Access to virtual assistant Bürokratt in the future

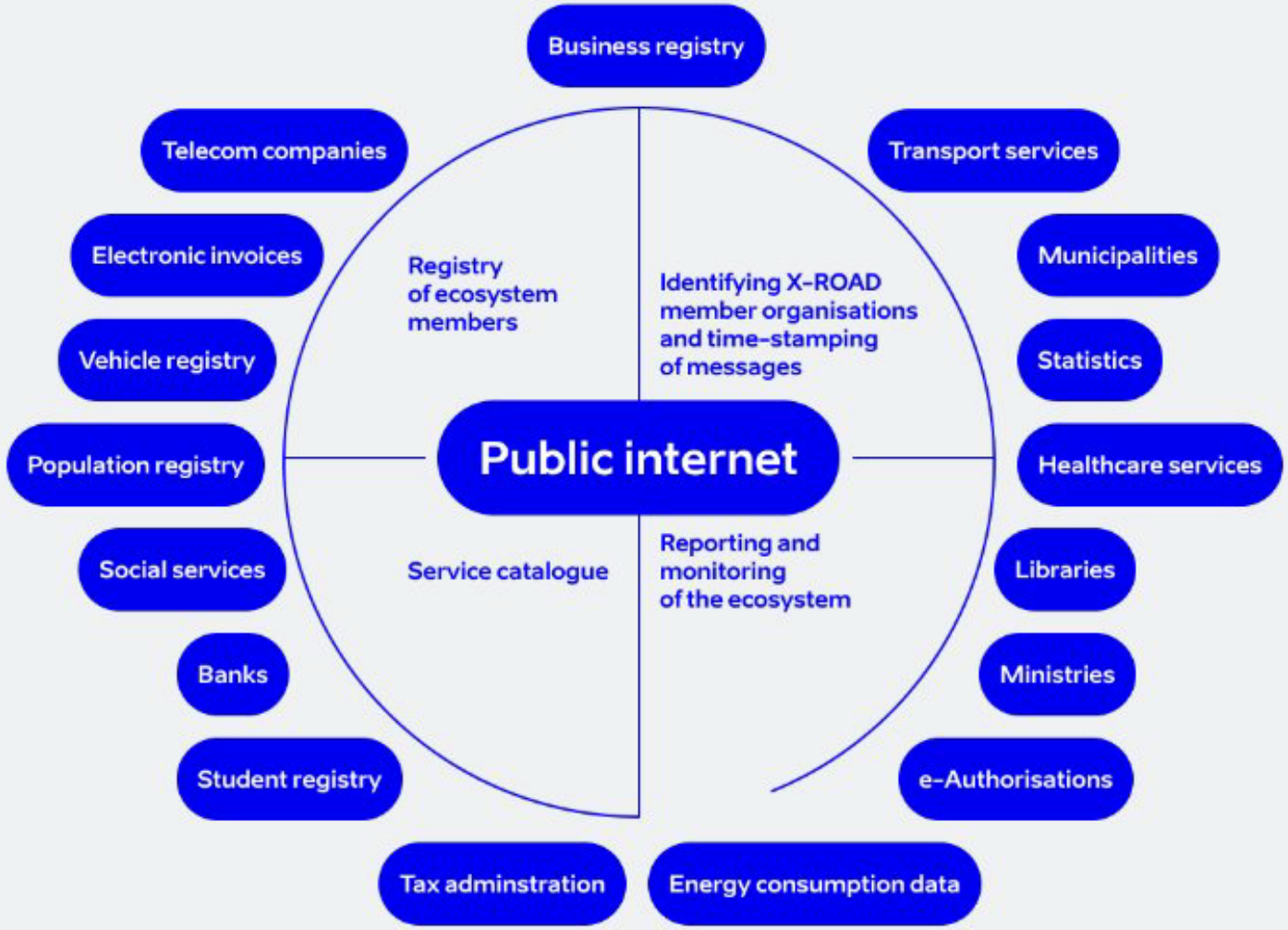
x-Road

Probably the world's most widely used digital public infrastructure for data exchange

X-Road® — an open-source platform for secure data exchange between organisations, used by the world's leading digital nations with >500M end-users.

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

+ Saving 3 million working hours annually
+ Over 3,000 different services
+ Over 3 billion transactions per year



Three pillars

The safest combination to information security

Confidentiality

e-identity:
ID-card
mobile-ID
Smart-ID
e-residency card

Integrity

Public Key Infrastructure
Data Embassy
Data Tracker

Availability

X-Road®

Cybersecurity

The strongest competence



+ First cyber attack against a nation state in 2007
+ Home of NATO CCDCOE and EU IT agency
+ Cyber defence league and cyber command
+ Non-permanent member of UNSC 2020-2021
+ Data embassy
+ KSI Blockchain

Estonian CyberTech cluster

© Sergei Zjuganov

Cybersecurity essentials



- + Extensive cooperation
- + Trust through transparency
- + Adequate resources & supportive regulatory environment
- + Central coordination
- + Focus on cyber hygiene

© Atko Januson

Main coordination formats

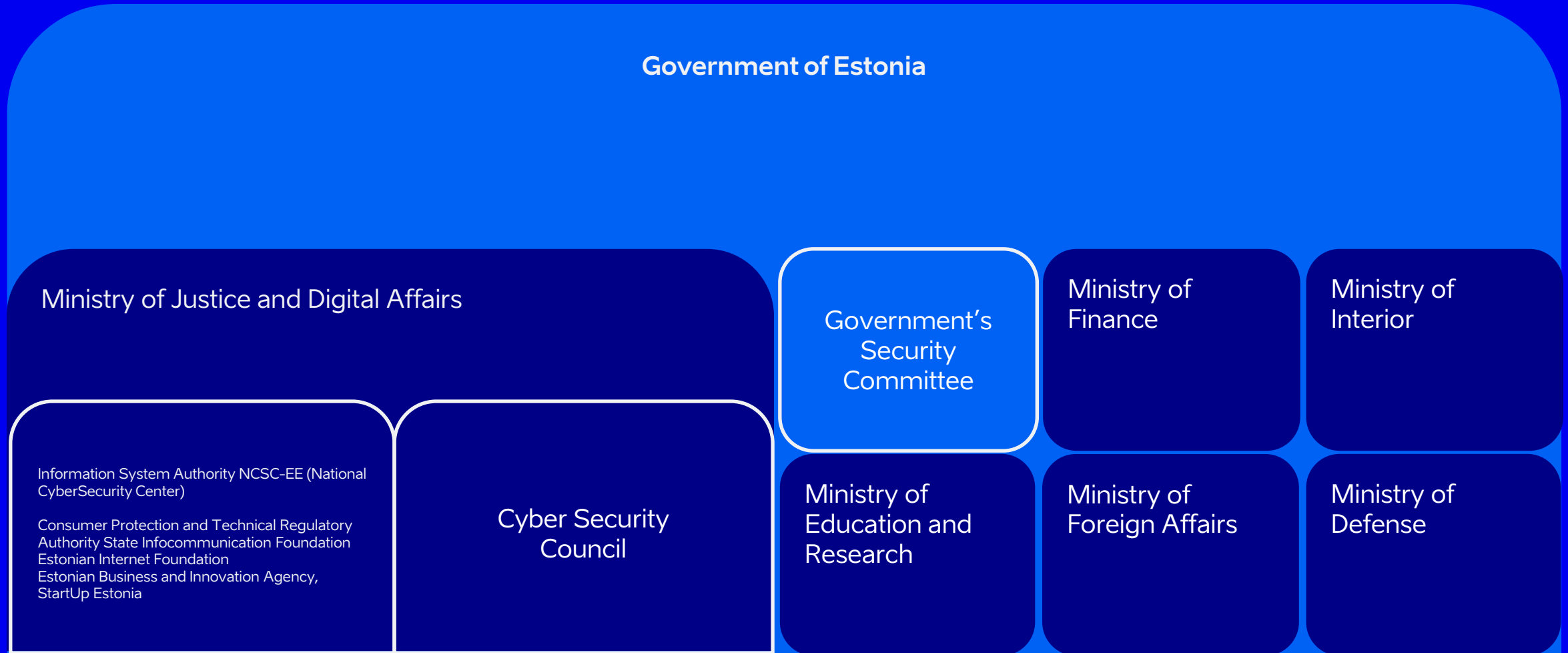
Securing the digital ecosystem



+ Cyber Security Council
+ National Cyber Security Advisory Council
+ Cyber Attack Attribution Commission

© TalTech

Management of national cyber security



Data embassy

Digital continuity of Estonia as a state



+ First data embassy in Luxembourg
+ Strategically important datasets
+ Highest level of security
+ Future: additional locations
+ Estonia as a host country

i-Voting

Internet voting in Estonia since 2005



+ First and still the only one in the world
+ Time- and location-independent
+ Strict-ly optional
+ Possibility to change your vote
+ 51% i-voted in the 2023 government elections

© Renee Altrov

Digital agenda 2035

Estonia, full of digital might



+ Human-centred, trustworthy, efficient and resilient digital society
+ Secure, personalised and proactive public services powered by AI agents
+ Transparent and human-controlled use of data and artificial intelligence
+ Secure cyberspace and reliable ultra-fast connectivity across Estonia

© Renee Altrov

Accelerate Estonia

Making illegal things legal



+ Data-driven legislative change to create new markets
+ Testing solutions in real-world conditions
+ 25 locally proven projects, scalable globally
+ €70 M in direct economic impact

Estonishing future

Seamless e-services available 24/7



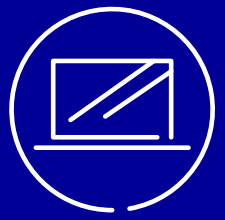
+ Proactive government
+ AI in government services
+ Cross-border digital governance
+ Personalised medicine
+ Reduce footprint of ICT

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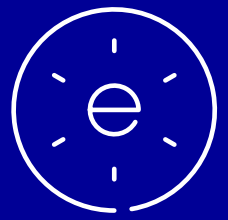
Success extending across borders



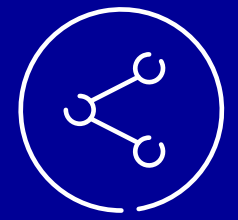
International collaboration of digital countries



Use cases in Estonian tech & IT solutions tool



e-Solutions from Estonia's ICT cluster



Cross-border digital government solutions

Lessons learned

Be boldest

+ Digital-minded leadership
+ Keep it short and simple
+ Transparency works
+ Shared platforms are quicker
+ Service design matters
+ Public-private partnership
+ Start-up mentality

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Smarter together

Let’s keep in touch!

sSign up to our newsletter and follow us:

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e-estonia@eis.ee



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