


Estonian ICT

Reducing administrative burden



A man in a red shirt, olive pants, and a backpack is climbing a dark, layered rock face. He is wearing a grey cap and has his arms extended to grip the rock. The background shows a clear sky and some green foliage on the left side of the cliff.

it's much more fun to go out and get
Problems than in a doctor's waiting room

INFORMATION
SOCIETY
INDICATORS



INFORMATION SOCIETY INDICATORS

100% of schools and GOs have computers

97% of business happens online

80% of families have home access to PCs

98% of income tax declarations made via the e-Tax Board

over 30% of votes were cast over the internet on 2015



**important decisions
no matter what the weather does!**



Fresh Air and Free Wifi

3G

4G

Internet
access is a
social right!



e-Identity



ID-Card

- 2002 - introduction of national electronic ID-Card
- More than 94% of the population has one
- Compulsory for all residents

ID-Card

Contains:

Certificate for authentication

(along with e-mail address Forename.Surname@eesti.ee)



e-estonia.com
The digital society



ID-Card

Contains:
Certificate for digital signature

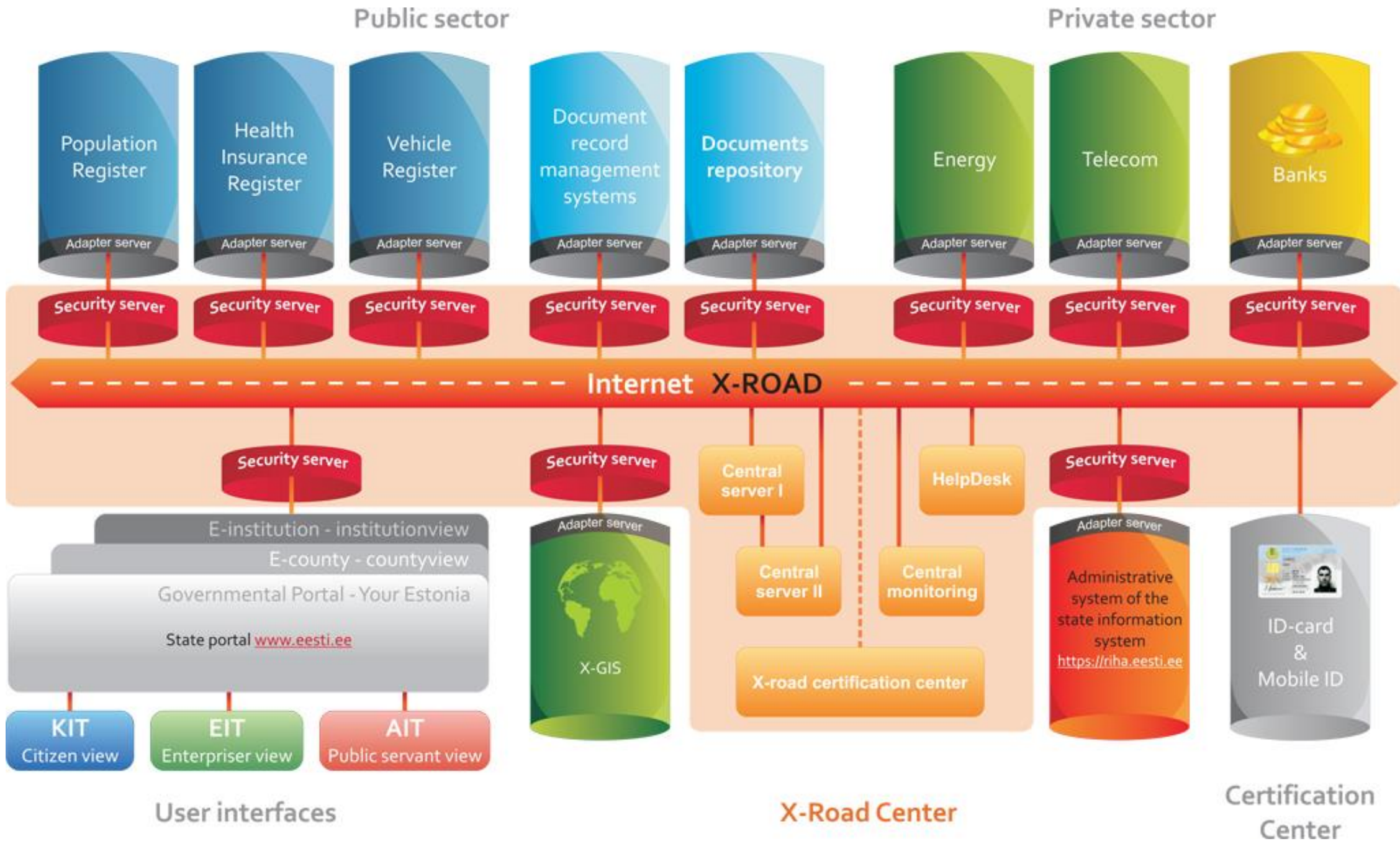


Mobile-ID

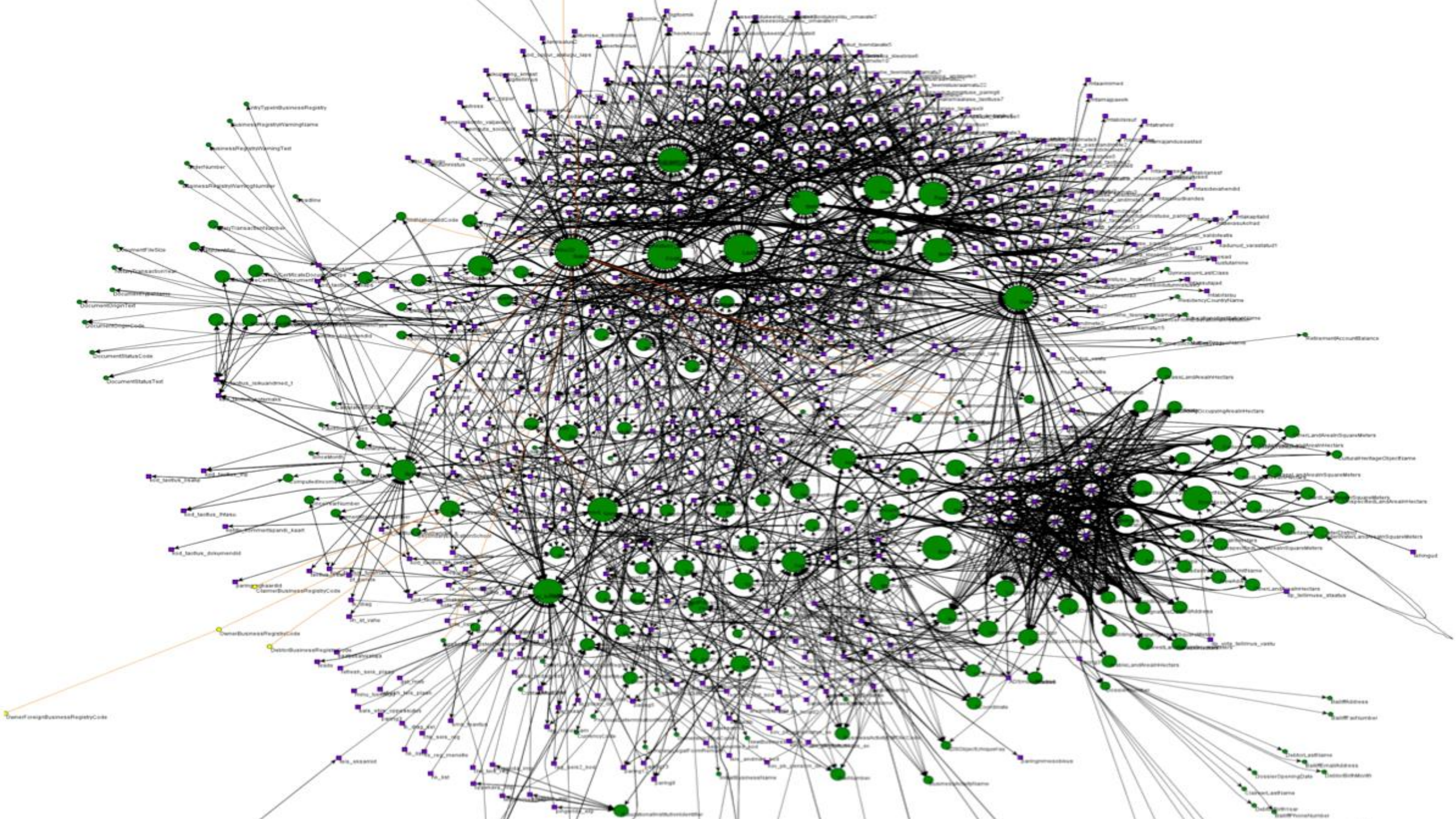
Introduced in 2007
Enables secure
authentication and
digital signatures
via mobile phone







X-Road was launched in 2001





What matters is

CONTROL,

not **CONFIDENTIALITY**

everybody must be able
to check, who, when and to
what purpose has
used his/her data



Don't be late unless you want your IT-systems to turn into a pumpkin....



Security, Trust & Verification



KSI technology introduced in 2007

Provides Unbreakable and Undisputable Integrity

Preserves the long-term history of security events and important digital assets

Ensures, you don't have to trust administrators to check the integrity of digital data

CIA Triad



Preventing the disclosure of information to unauthorized individuals or systems.

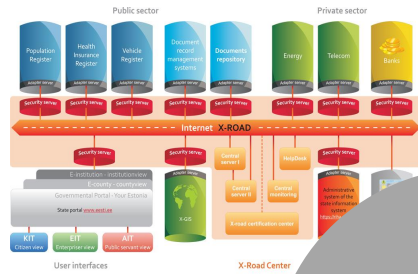
Confidentiality

ID-card
Mobile-ID

Making sure that the computing systems, the security controls, and the communication channels are functioning correctly.

Maintaining and assuring the accuracy and consistency of systems and data

Security Model



Availability

X-road

Integrity

KSI



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 Queue System

e-estonia.com
The digital society



Introducing: e-residents (e-Estonian)



EESTI VABARIIK
REPUBLIC OF ESTONIA



**LUCAS
EDWARD**

30.11.2017
N0100001
36205030034

KEHTIV KÜNI / DATE OF EXPIRY
DOKUMENDI NUMBER / DOCUMENT NUMBER
ISIKUKOOD / PERSONAL CODE
KINNULT ELEKTRONILISEKS KASUTAMISEKS
ELECTRONIC USE ONLY



DIGITAALNE ISIKUTUNNISTUS
DIGITAL IDENTITY CARD

Your key to e-Estonia

HOW WE
GOT THERE?



1996: Tiger Leap Foundation to support ICT in schools



TIIGRIHÜPE

2001: Look@world starts to build 500 Public
Internet Access Points



vaata maailma

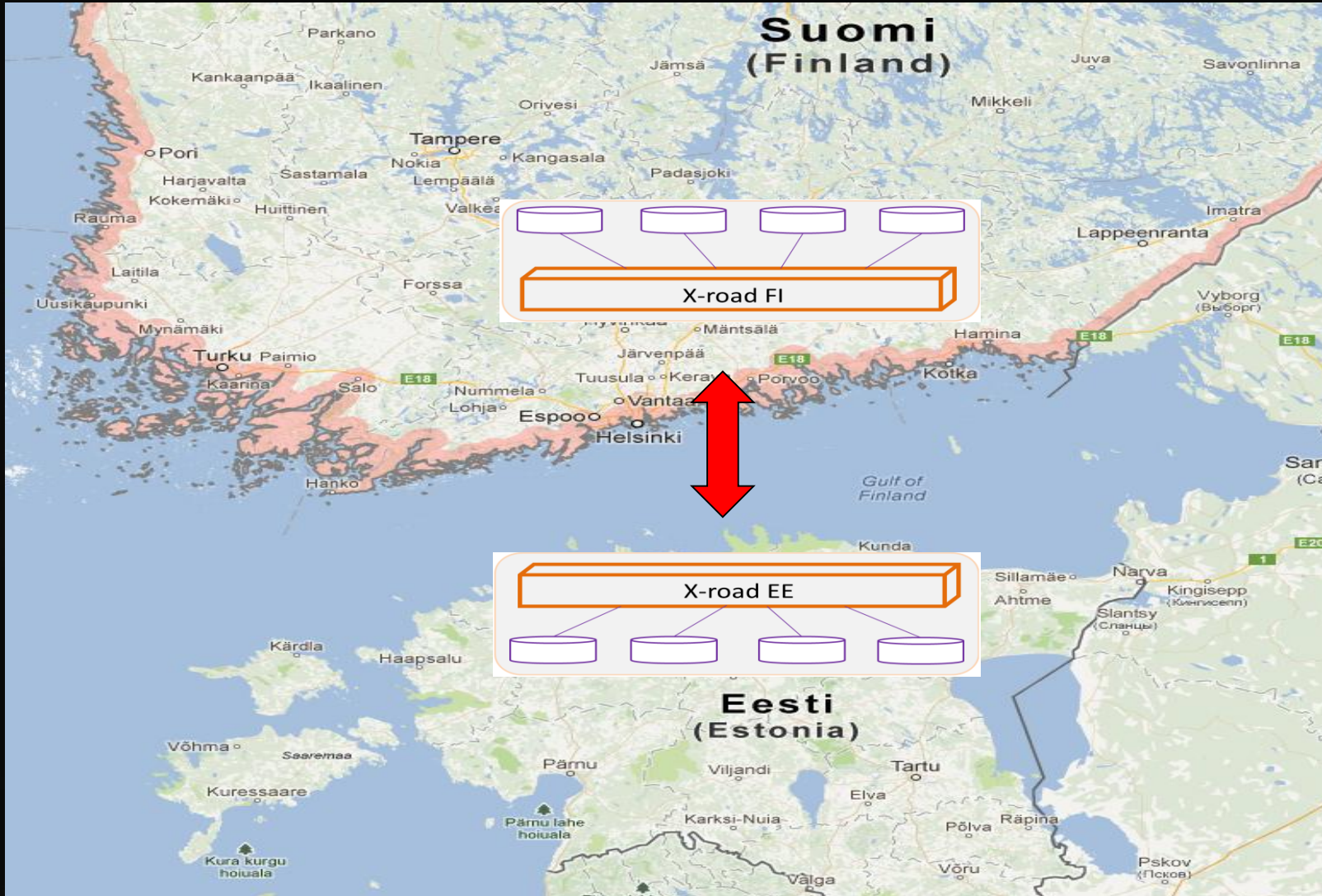


2002, 2009 & 2010
Computer courses for 10%
of adult population
under Look@world
project

What's Next?



Cross-border e-services





EESTI VABARIIK
REPUBLIC OF ESTONIA

Use ID-card Use Mobile ID

No card in reader

Check if the ID-card is inserted correctly to the reader.
New ID-cards have chip on the back side of the card.

Container: C:\Users\ndrek\Desktop\Dropbox>Showroom ...oonid\ndrek\ICT_MoU_FI-EE_10dec2013.bdoc [Save](#)

Container content:

ICT_MoU_FI-EE_10dec2013.odt	20 KB	
-----------------------------	-------	--

[Save files to disk](#)

[Send container to email](#)
[Browse container location](#)

Signatures

<p> Jyrki Katainen / I agree Signed on 10. December 2013 time 11:11 Signature is Show details Remove</p>
<p> Andrus Ansip Signed on 10. December 2013 time 11:04 Signature is valid Show details Remove</p>

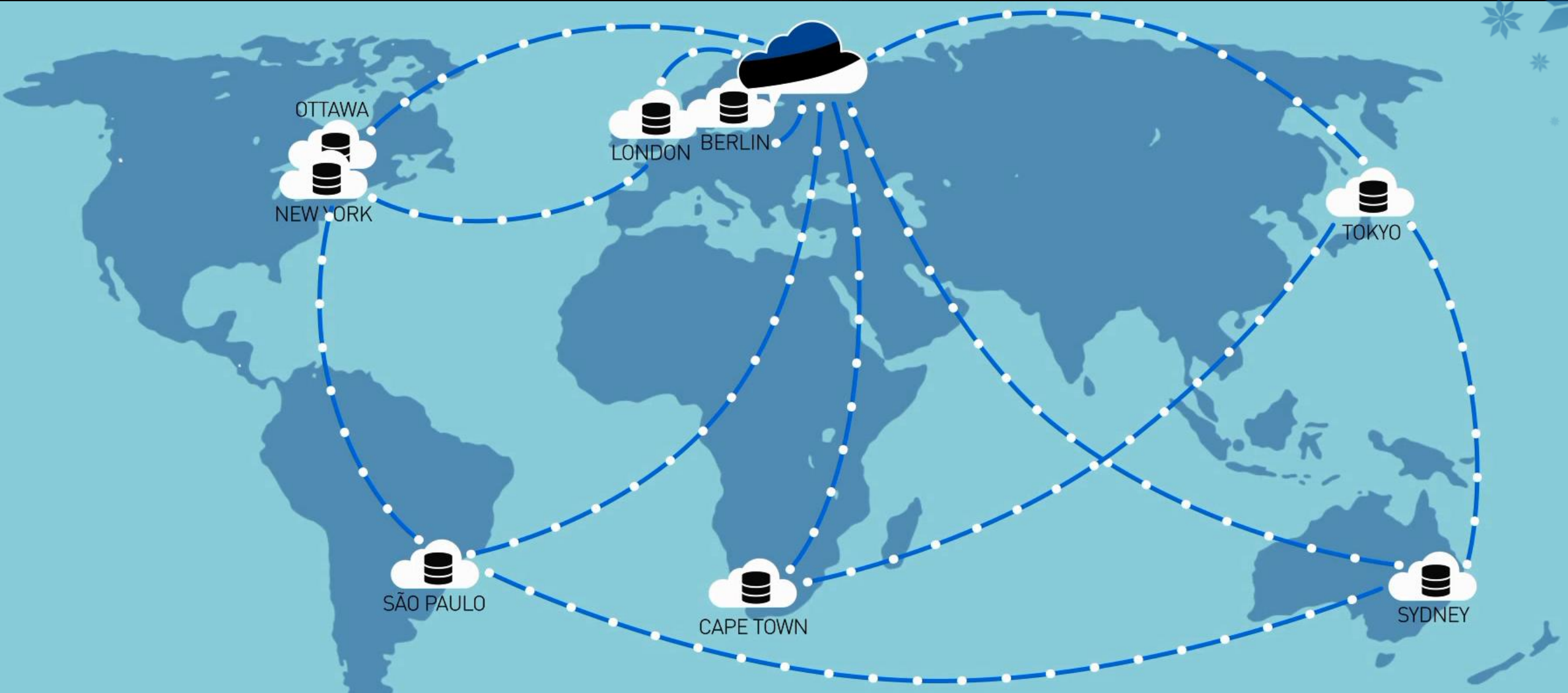
[Print summary](#)
[Encrypt document](#)

[Add signature](#) [Close](#)

e-Receipt



Data Embassy





Karli.Suvisild@eas.ee

e-estonia.com
The digital society



e-estonia.com
The digital society

