# Introduction to Estonian e-model – architecture, digital ID

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#### eGA

- An independent and mission-based: non-profit, non-governmental, non-academic.
- Jointly brought into existence by UNDP, Open Society Institute and Estonian Government.









## Our reach

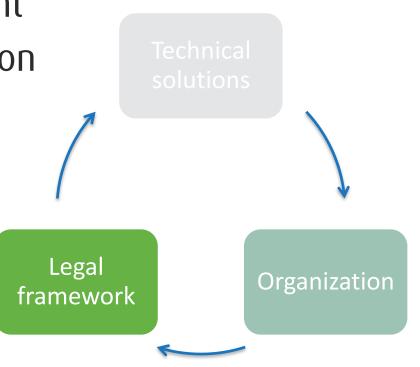


Cooperation with 90 countries, 4000+ participants in training events



#### Compentencies

- Central & local e-government
- E-democracy & e-participation
- Interoperability, open data
- Cyber security
- E-identity
- Change management





# Balanced e-Governance = Combination of electronic services and participatory services

e- GOVERNMENT e-Services



e-DEMOCRACY

e-Participation



## Parental benefit

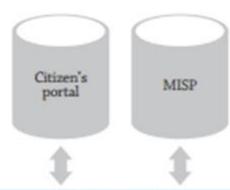
Interoperability of 5 information systems from 5 government institutions



#### PARENTAL BENEFIT EXAMPLE

#### CITIZEN:

- submits applications online
- doesn't have to give data, which is already known to IS



#### CIVIL SERVANT:

- no need to check data in different DBs
- no need to revise mountains of documents

#### Internet X-ROAD

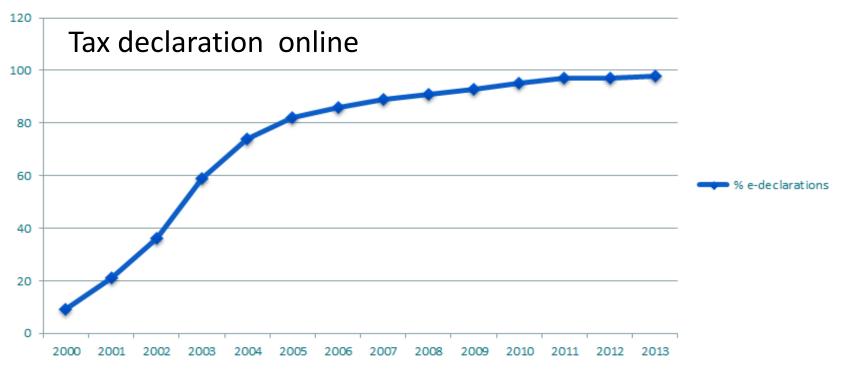






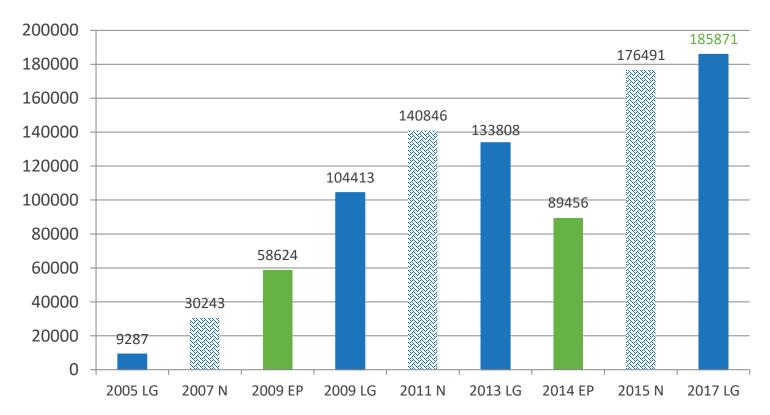
IS of Tax and Customs Office

### Takeup takes time





#### Number of i-votes







Organization process



Legal framework



Fiscal framework process

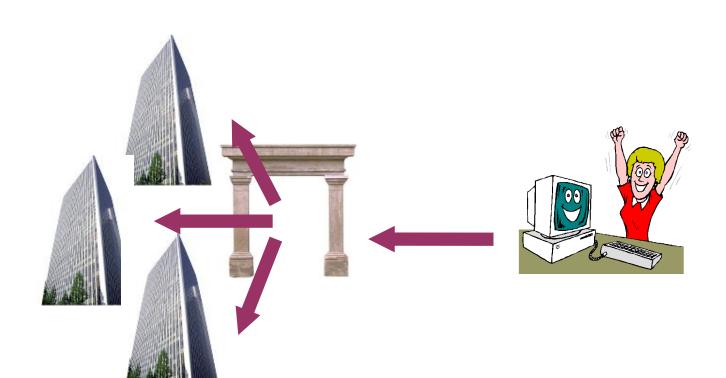


Technical architecture

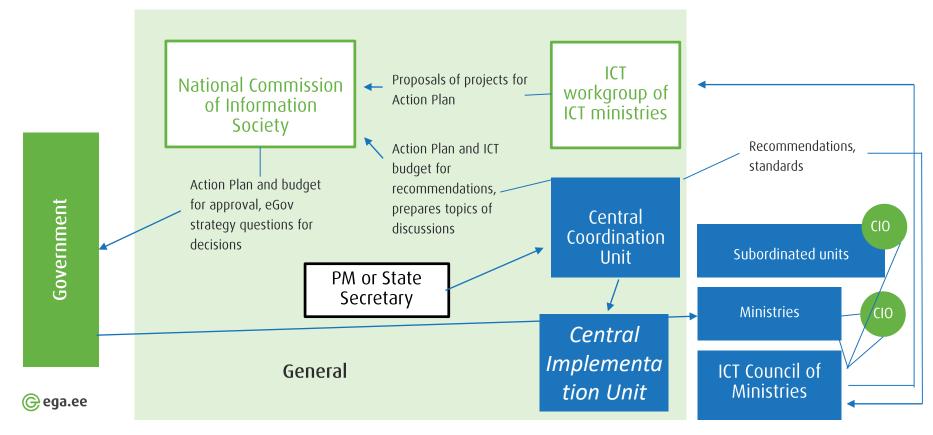
e-Government Policy / Strategy

#### **Principles**

- Citizen (customer) orientation "ONCE ONLY" concept
- Leading role for the private sector
- Efficient and transparent public sector
- Protection of personal data
- Measures against digital divide (ID-cards example...)
- Neutrality concerning technological platforms



### e-Government Coordination



## Central coordination and IOF management – Different roles

#### eGovernment Central Coordination Unit:

eGov and Information Society strategy planning and monitoring.

- Collecting and analyzing ICT systems in government
- eGov budget planning with Ministry of Finances and donors
- Developing and giving approvals for legal acts related to eGov
- Preparing eGov strategies and action plans
- Monitoring Action Plan development
- Cooperating with ClOs. Trainings for ClOs.
- Planning and coordinating international cooperation on eGov.



## Central coordination and IOF management – different roles

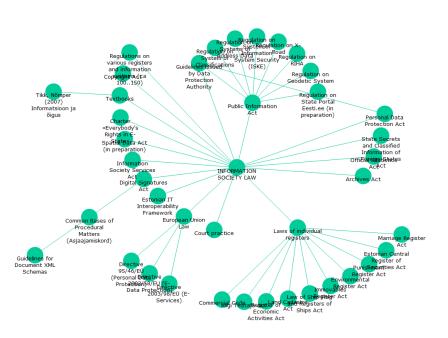
eGovernment Central Implementing Body:

Implementation of eGov interoperability platform.

- Data exchange layer and monitoring
- Portal
- IOP management system metadata
- Infrastructure
  - Network
  - eID
  - CA
  - Mobile and payment gateway
  - Cloud

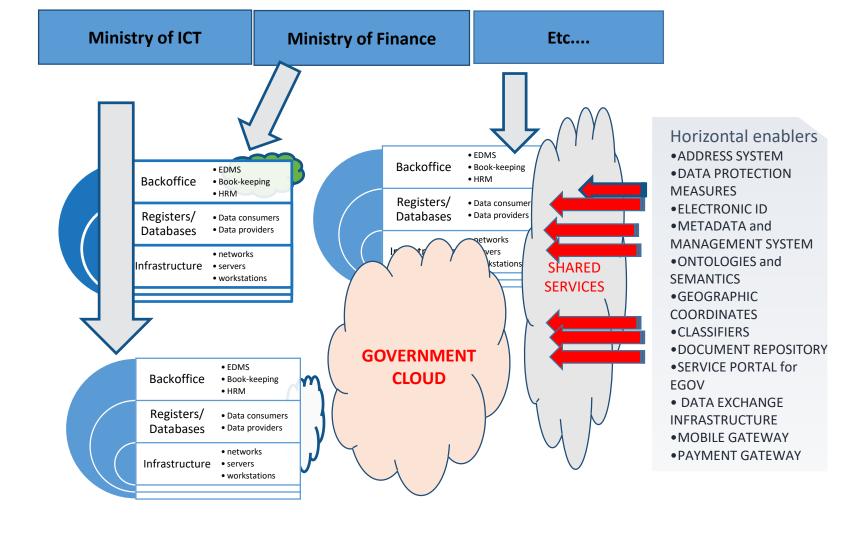


## Legal framework



- Technology can not be regulated but relations between people, organizations...rights and responsibilities
- Regulate as minimal as possible. Use existing legal framework and make needed amendments



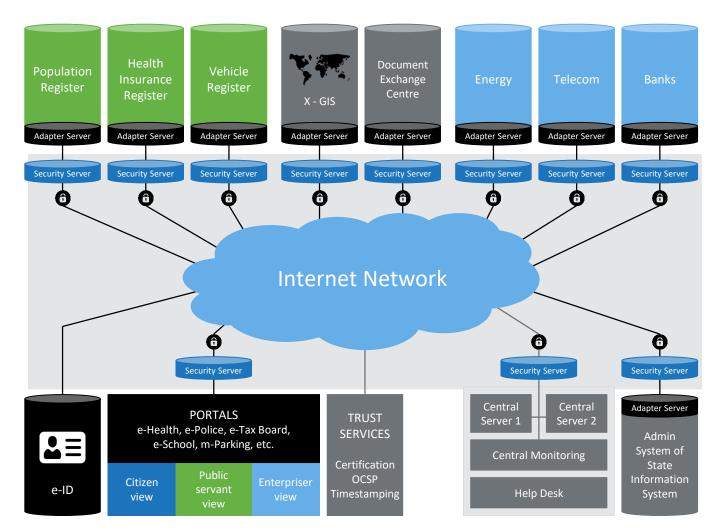


#### X-Road

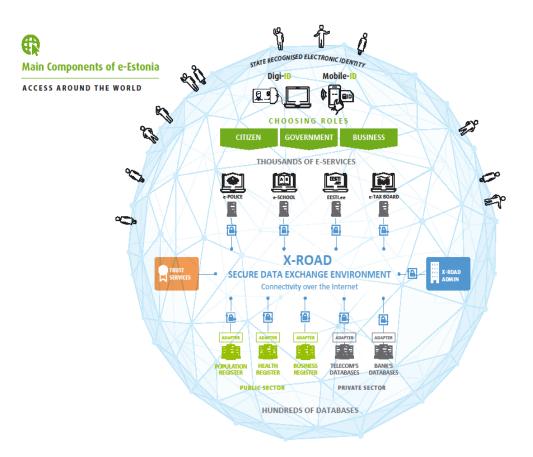
#### **Digital ID**







- No duplicated databases
- Clear data ownership
- Customer orientation
- Personal data protection





# Digital ID and Signature

**Since 2002** 



06.10.2017

•Digital signatures 417 319 798

•Active cards: 1 296 888

•Electronic authentications: 599 635 675



Source: <a href="http://id.ee/en?id=30468">http://id.ee/en?id=30468</a>,

### mID

#### (in SIM card)

Doesn't need software installed on PC
Doesn't need web browser support
Works on any handset
Can be supported by any operator





Catalogue of interoperabilty solutions

600 information system
descriptions
2500 service descriptions
40,000 data objects
650 code lists
over 900 organisational entities
1400 contact persons
https://www.ria.ee/x-tee/fact/#eng



#### **Lessons learned**

- Main challenge is in organization and planning, not the money or technology
- All knowledge should be in the country can be supported by international experiences
- Local ICT business should be supported by Government. eGov is not academic issue
- Too strong focus on technology and project based actions
- Finance model is not motivating citizens
- eGov methodology might be transferable... not SW or HW
- Impact can be seen in 3-6 years politicians are not motivated
- Driving forces are unclear
  - In Estonia, banks and business sector were driving force



## Thank You

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