



REPUBLIC OF ESTONIA  
INFORMATION SYSTEM AUTHORITY

# Perspective of e-Estonia, x-road and policy development

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# Agenda and contents

- Context and background
- Current situation
- Diagnosis
- Plans

# **Context and background**

# **Strict and mature legislation on data ownership**

Agencies are responsible for the data they collect  
Need to justify both collecting and sharing of data

# **Mature and ubiquitous digital identity**

Using strong and convenient authentication is mainstream by both service providers and consumers

# **X-road provides well-controlled interconnectivity**

1000+ services provided. Once you can prove the right to access, using services in a secure and audited fashion is simple

# **Estonia is heavily resource-constrained**

Very few users, bureaucrats, developers. Strong focus on financial efficiency

# **Current situation**



# **All data public by default since 2015**

All data created while providing public services must be open data unless explicitly stated otherwise

# **53 open data sets available @opendata.riik.ee**

Several other competing repositories. There are 611 known datasets  
containing 70 172 data elements

# **Access to data still a struggle**

Data quality differs, formats are awkward and gaining open datasets is very difficult

# **Open data is very seldom seen as a solution**

There are distinct initiatives to make data open but very few systems rely on open data by design

# Open data way down in the priority list

There are  $\approx 0.3$  FTEs focusing on open data policy and strategy in Estonian public administration

# Diagnosis

# **X-road, eID and digital-first solve most fo the things we can afford**

Why rely on generic anonymised open data when personalised well-defined APIs and services are available?

# **Current open data approach is stuck between machine- and human readable**

Data is neither easily machine-readable nor providing direct value to humans



# Plans

# **Continue preaching open data as a solution**

Information system registry currently developed is an example

# **Fewer but stricter requirements to drive really machine-readable data**

Publicly unit-tested and documented APIs, client libraries in R, Python, JS, etc.

# **Start mandating really human-readable data**

If you are already making data available,  
make them available via visualisation and drilling tools



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# Thank you!

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