



CALRIS

Co-development of Adaptable Land Register Information System initiative

Government initiative, share & reuse of
e-government technology

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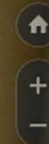
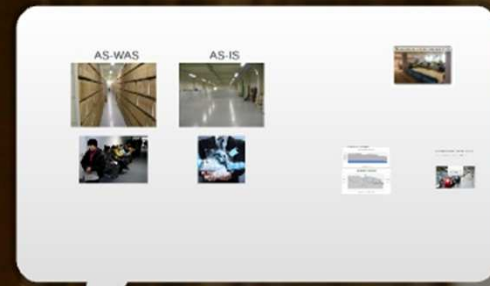
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Estonia



Electronic register is better than paper register!



AS-WAS



AS-IS



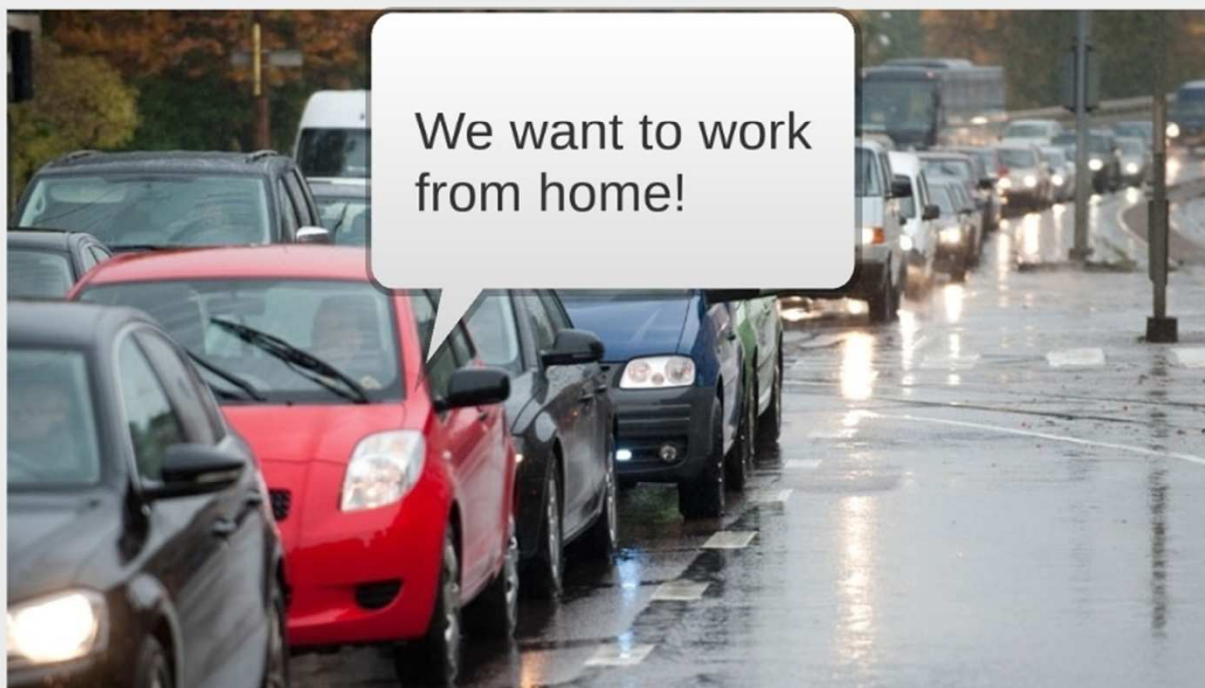
Service counter is empty, users are online



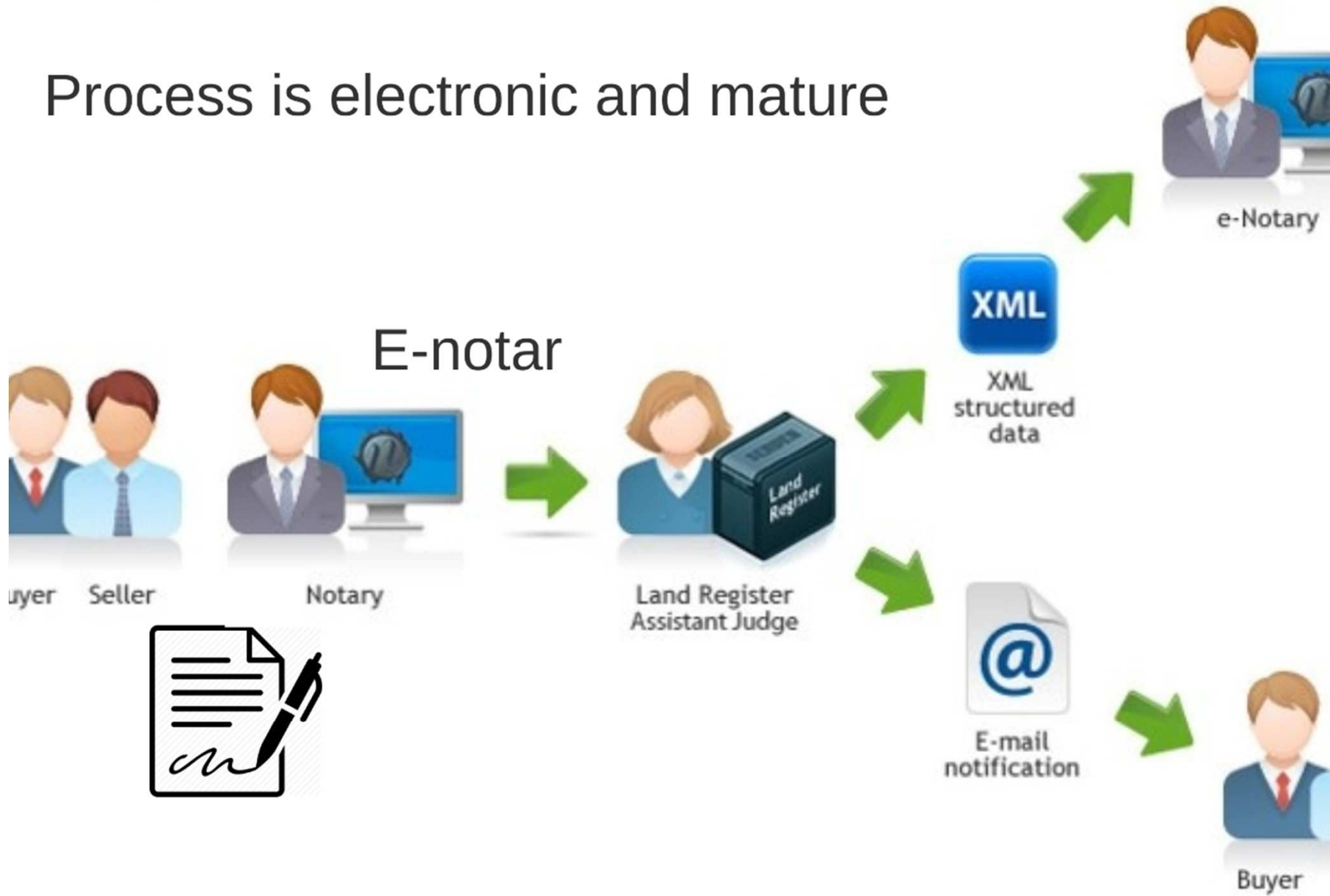
Working environment, counter service!?

Home office option allowed for registrars!

- Secure VPN network
- Electronic identity PKI login
- Electronic signature used in decision making
- Block chain (implemented in coming months)



Process is electronic and mature



Problem to solve:

Electronic Land Registry Management System sustainability

1. Is 11 years old (No legacy policy > 13 years).
2. Request for change price is high.
3. System components are outdated.
4. Growing need of higher performance.
5. Outdated interface (UI&UX).
6. Focus is changed from paper to electronic.



<http://www.rik.ee/en/e-land-register>

adastre



Cadaster NR



Unique ID

population register



Government guarantee to electronic information by law

Long-term strategic choices for Estonian Land Registry Information System

1. Update old IT-system
2. Develop a new IT-system
3. Reuse/buy existing system from another country
4. Buy a product from the market
- 5. Co-create the system with other countries.**
 - **Reuse the knowledge/best practice**
 - **Reuse existing technical components**

A glowing lightbulb with a dark blue base and a yellowish glow inside. The text is centered within the bulb.

CALRIS
stands for:

**Co-development of
Adaptable Land Register
Information System**



CALRIS goal

- Open, efficient and inclusive process
- Innovation, sharing and reusing of technology
- Methodology for co-development of GovTech
- Test methodology in real case scenario
 - Land Registry Management System in Estonia
- Collaborative open development

Benefits of co-creation

- New shared ownership model
- Shared staff of the team
- Co-developed and open development system
- Higher efficiency and better cost control
- Higher quality
- Better user experience

Long term strategic choices for Estonian Land Registry Information System

1. Upgrade of system
2. Develop a new system
3. Develop existing system from another country
4. Buy a product from the market
5. Co-create the system with other entities
 - Reuse the knowledge from previous
 - Reuse existing technical components



Benefits of co-creation

- Best practice knowledge base
- Better quality of the result
- Sustainable technology development practice
- More development partners- better price
- Faster development
- EUPL - free licence
- Shared cost for new functionality



12 Partners in CALRIS

8 countries

Centre of Registers and Information Systems ESTONIA
Ministry of Justice of ESTONIA
Tallinn University ESTONIA
Tartu County Court ESTONIA
Land Board ESTONIA

Bundesministerium Fuer Justiz AUSTRIA

Registers of Scotland UNITED KINGDOM

Tiesu administracija LATVIA

Kabul University AFGHANISTAN

Elizade University NIGERIA

Ghana Technology University College GHANA

Emirates Real Estate Solutions UNITED ARAB EMIRATES



The deliverables of the project CALRIS

1) Methodology- Guidelines for conducting an inclusive, international and cross-sector co-development of a public land register management e-solution.



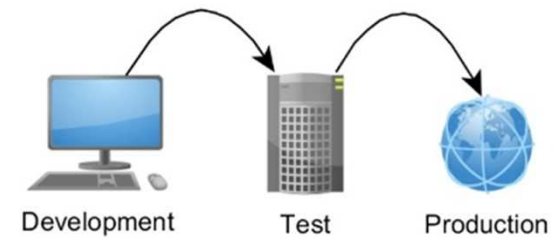
2) Reusable IT system- A trans-nationally adaptable core land register information system (public procurement).



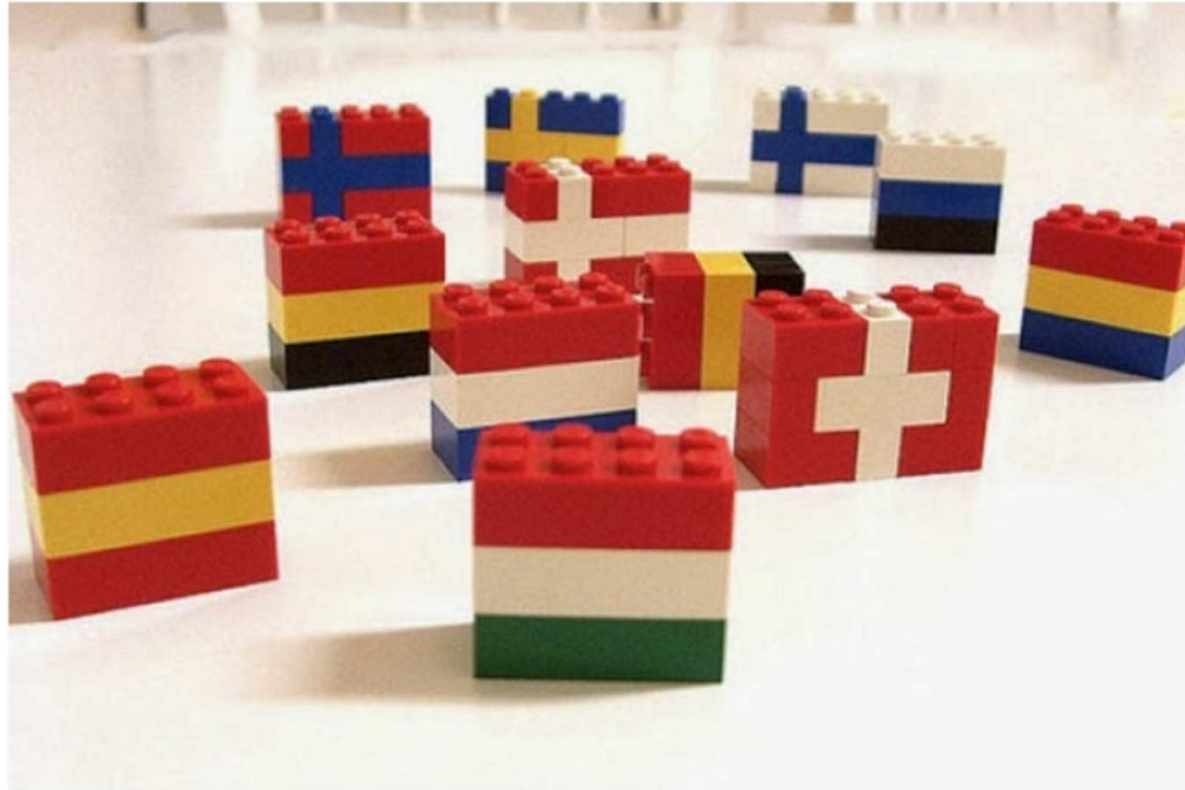
3) Demo Portal- A cloud-based land register demonstration environment, for testing the features of the solution.



4) Implementation in Estonia - A piloted country-specific adoption of the core land register software solution for Estonia (public procurement).



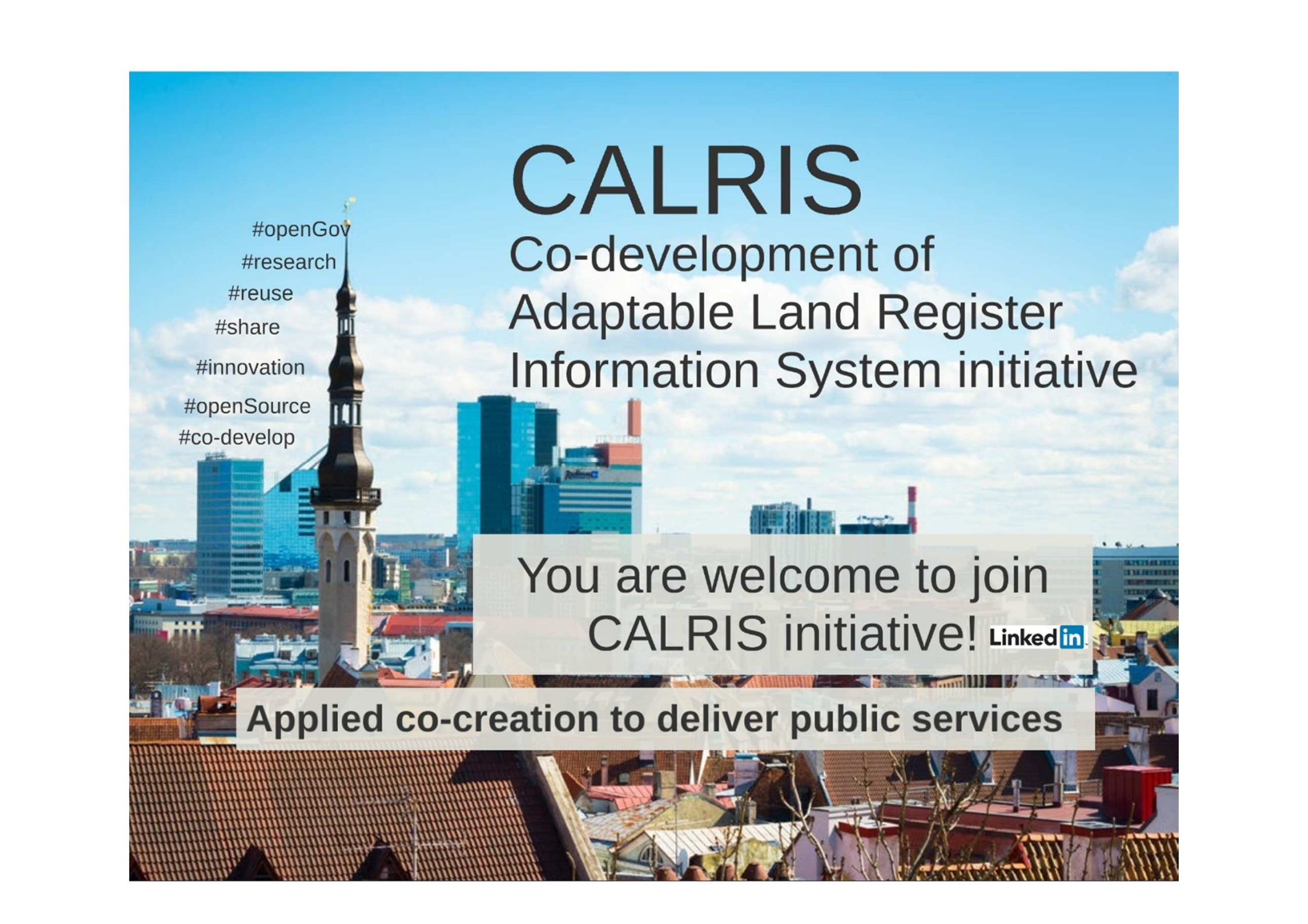
Technical architecture to be investigated



#MicroServices

#CloudService

#Blockchain



CALRIS

Co-development of
Adaptable Land Register
Information System initiative

#openGov
#research
#reuse
#share
#innovation
#openSource
#co-develop

You are welcome to join
CALRIS initiative! [LinkedIn](#)

Applied co-creation to deliver public services