



A Vision of Central Authorization System in Estonia

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Content:

1. Authorization – Lessons Learned
2. Future Prospects in Estonia

Expectations and Experience of the Preceding Years

Initial Expectations for LRI Authorisation (-2018)

The Strategy of European e-Justice 2014 - 2018 had stated:

"**Members of the judicial authorities** should be given secure access to the various functionalities..... ; they should have **differentiated access rights** „

The initial understanding of an LRI Professional Authentication/Authorisation Service (PAS):

- The authorisation of a public official or legal professional does not have to be done by the Member State's Land Registry.
- Authorisation could be done by trusted third parties, e.g. the relevant professional organisations or the Member States' administrations.
- The PAS could either be located in the user's country, or in the searched country.

Initially Envisioned Steps of Authorisation Process

Project: LRI MS Connection (2018-2019)

- 1.The user clicks on the “Authenticate as professional” button at a LRI page.
- 2.The user selects a country and a **Professional Authentication System (PAS)** from the list.

Search for property rights



Authenticate as professional

This page allows you to select a Professional Authentication System in order to authenticate as professional.

Select Professional Authentication System

Country:

 Estonia

Professional Authentication System: *

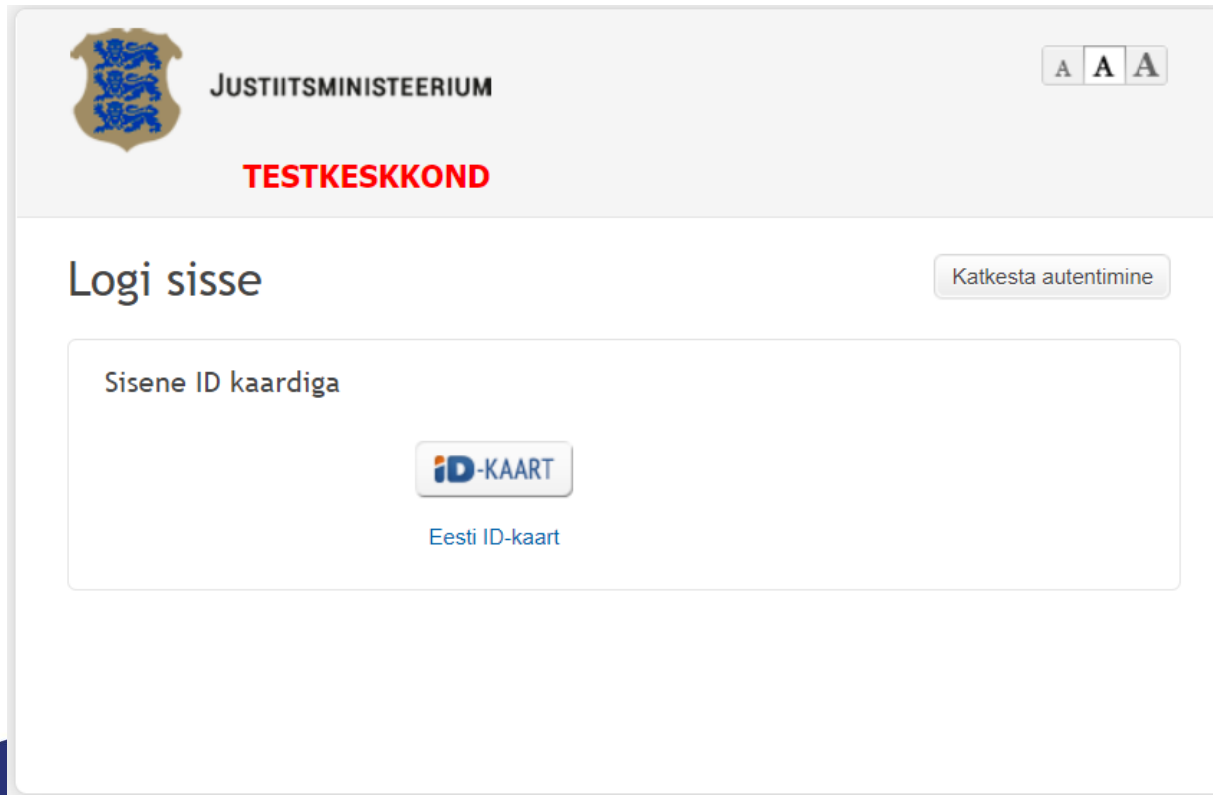
e-Land Register PAS

Next

Initially Envisioned Authorisation Process

Project: LRI MS Connection (2018-2019)

3. The user authenticates in the PAS (through username-password, smart cards, etc).



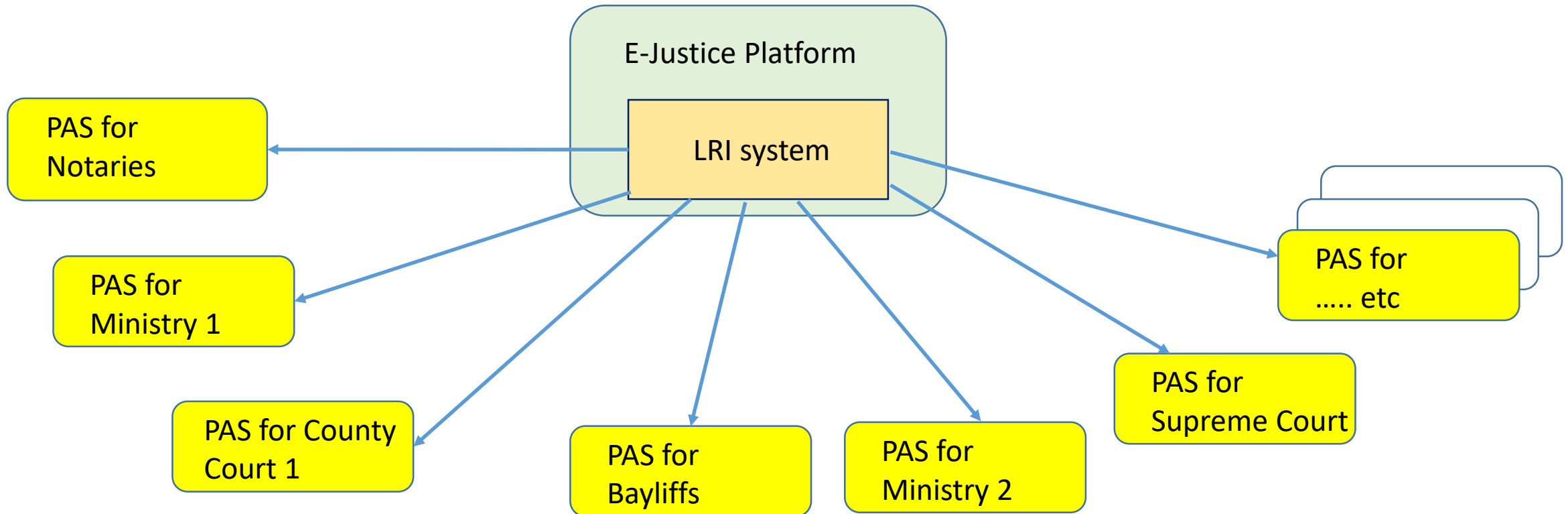
4. The PAS returns confirmation of authentication (user ID, name) as well as the authorisation (yes / no).

5. The LRI system identifies the user **as a professionally certified user** of the country.

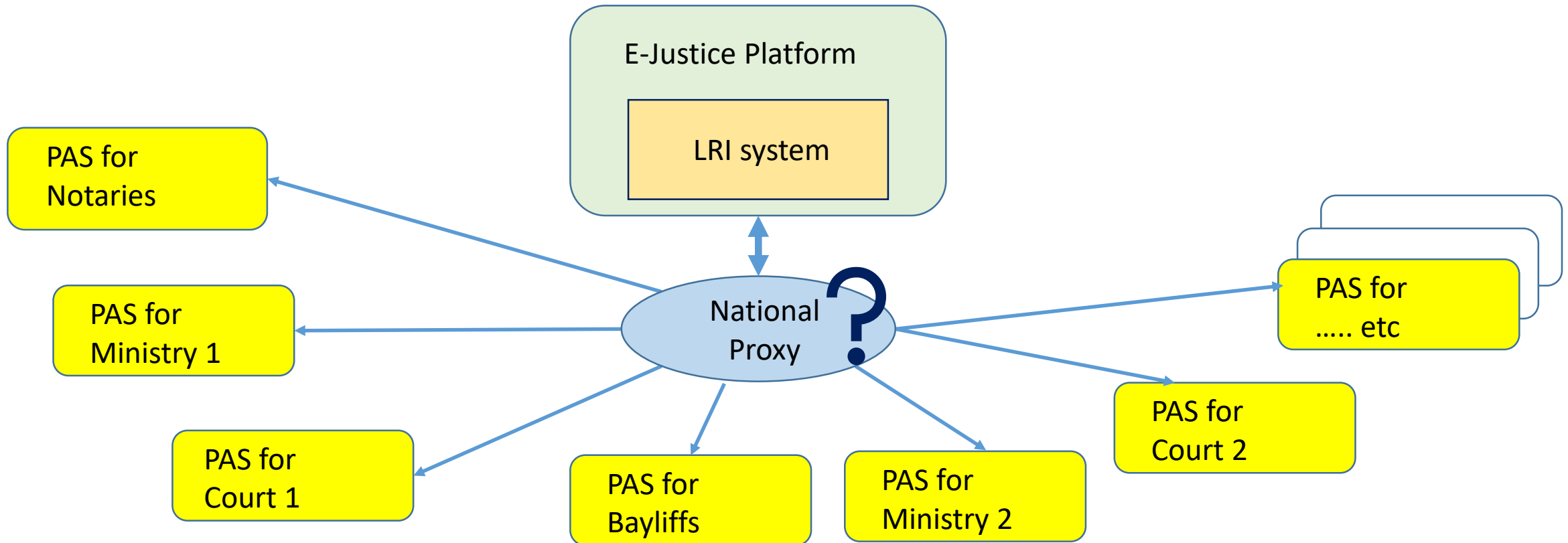
A Deeper Understanding of the Authorisation Gained

1. The Authentication and Authorisation are technically two separate processes.
2. There are many different types of „public officials“ and „legal professionals“.
3. There are many ways to build a Professional Authentication System (PAS).

Option 1: Many national Professional Authentication Systems linked with LRI



Option 2: One National Authorisation Proxy for many National PAS

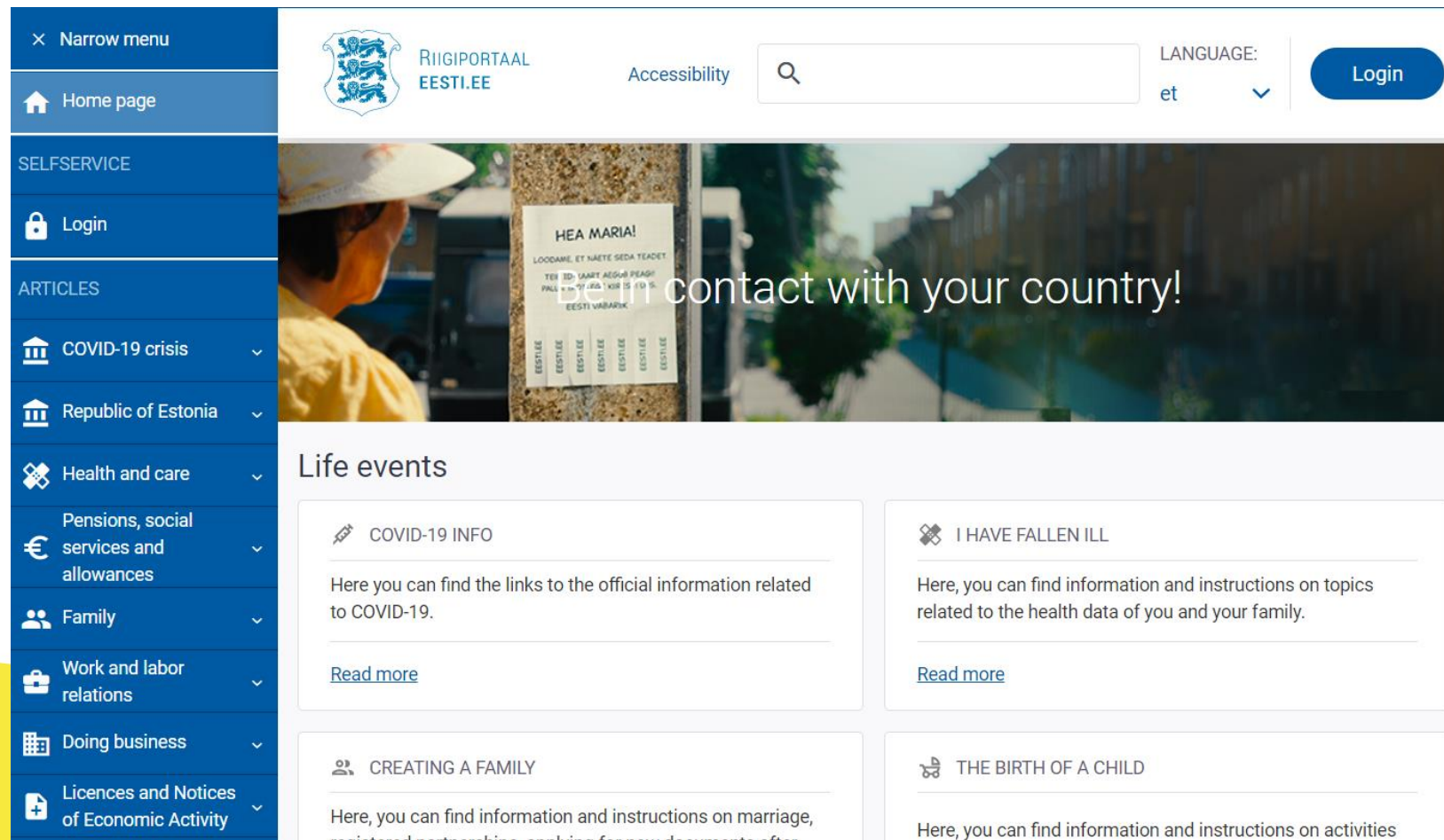


Future Prospects

A Search for a Smarter Solution

A Vision and Ideas for a Central Authorisation

One-Stop Shop for Entrepreneurs/Businesses at the Digital State Gateway at **Eesti.ee**



The screenshot shows the Eesti.ee website interface. On the left is a blue navigation sidebar with a 'Narrow menu' icon at the top. Below it are 'Home page' and 'SELFERVICE' sections. The 'SELFERVICE' section includes 'Login'. The 'ARTICLES' section lists: 'COVID-19 crisis', 'Republic of Estonia', 'Health and care', 'Pensions, social services and allowances', 'Family', 'Work and labor relations', 'Doing business', and 'Licences and Notices of Economic Activity'. The main content area features the 'RIIGIPORTAAL EESTI.EE' logo, an 'Accessibility' link, a search bar, a 'LANGUAGE: et' dropdown, and a 'Login' button. A large banner image shows a person in a yellow shirt and hat looking at a sign that reads 'HEA MARIA! LOODAME, ET NÄETE SEGA TEADET...'. Below the banner is a 'Life events' section with four cards: 'COVID-19 INFO', 'I HAVE FALLEN ILL', 'CREATING A FAMILY', and 'THE BIRTH OF A CHILD'. Each card contains a brief description and a 'Read more' link.

A Single Point of Contact/One-Stop Shop for Businesses

The one-stop shop would be a service gateway, based on the business events and needs of a company, to access various services different state or private institutions.

A Vision of the One-Stop Stop Shop for Businesses (Oct 2020):

- A future view of the one-stop shop for an entrepreneur/company
- A development and action plan (road map)
- An analysis of the development of business event services
- A prototype of the contact point.

The One-Stop Shop for Businesses

There are at least 36 different service environments for the consumption of institutional services.

The vision paper discusses also some of the aspects of user role management:

- One person may have many roles.
- An authorised business user sees services and operational possibilities according to all the roles assigned to him/her in the selected company.
- The same person may also be the authorised user in different companies with different roles.

The One-Stop Shop will be going live in stages, starting from 2023.

The One-Stop Shop for Businesses

Linked Analyses

Other analyses done so far:

Architectural Analysis of the One-Stop Shop (July 2021)

Analyses ongoing:

Among others, the Analysis of the Management of Access and Powers of the Business Representatives (started in June 2021).

Analysis on the Architecture of the One-Stop Shop

Completed by July 2021

Authentication: The Eesti.ee portal uses the national authentication service called TARA. TARA supports OpenID Connect protocol. For single-sign-on (SSO) the TARA SSO could be introduced.

Authorisation: The current system at the Eesti.ee portal is outdated. The future system could offer access rights management, which can address not only legal rights but also those where one person has authorised someone else (mandates/powers).

For a user-centered approach, the access rights must be established in a single place (Once-only principle).

For example, rights granted to a specific service at the Tax and Customs Board system must also apply to the same service via the one-stop shop at the Eesti.ee portal.

Analysis on the Architecture of the One-Stop Shop

There are at least two options to realise the vision, both with some pros and cons:

Solution A - a national central management system of access rights.

The State Information Agency (RIA) might centrally maintain a large database of access rights to which other authorities transmit access information.

RIA would maintain the service of access rights, whereas the state institutions would manage the actual rights and mandates.

Solution B – information on access rights is inherited from the systems of the state institutions.

The central system collects the information regarding user access and applicable user role in each system of the state institutions.

Analysis on the Architecture of the One-Stop Shop

The Summary:

- Distributed access management systems would be the right choice in terms of reliability and productivity.
- On the other hand, distributed systems create problems when services need to be pooled in one portal.
- There could be one state service, which collects in real time the information on the access rights established by law from various registers, keeping it in the short-term memory.
- On the other hand, the access rights based on mandates and powers must be received by an additional service from the Access management system of the service provider.

Analysis of the Management of Access and Powers of the Business Representatives

To be completed by July 2022

The analysis will:

- Map the current state of the identifying the powers, roles and access rights
- Map the available solutions for access management
- Map the needs of businesses

A concept will be created on how to:

- give the company's representative a central overview of the mandates and access rights;
- to centrally manage these rights from the one-stop shop.

Analysis of the Management of Access and Powers of the Business Representatives

The analysis also takes into account:

- the cross-border verification of the right of representation
- the authorisation and granting of access rights to foreigners and their businesses.

Conclusions for the Estonian LRI project

- The Land Register could not be the mediator of the LRI access rights – these should be managed by each state institution or interested organisation.
- It would be wise to wait for the results of the mentioned analysis on the management of access rights and roles for businesses.
- Perhaps the rights for public officials and persons acting in public duties (notaries, bailiffs) could be handled in a similar manner to the rights or business representatives.

Thank you!

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