



# Land Registers Interconnected

## LRI Search Functionalities and Lessons Learned

Katri Tammsaar

Centre of Registers and Information Systems  
Estonia

09.-10.05.2019

LRI MS Connection / [lri-ms.eu](http://lri-ms.eu)

This presentation was funded by  
the European Union's Justice  
Programme (2014-2020).



**BRZ**



Funded by  
the Justice Programme  
of the European Union

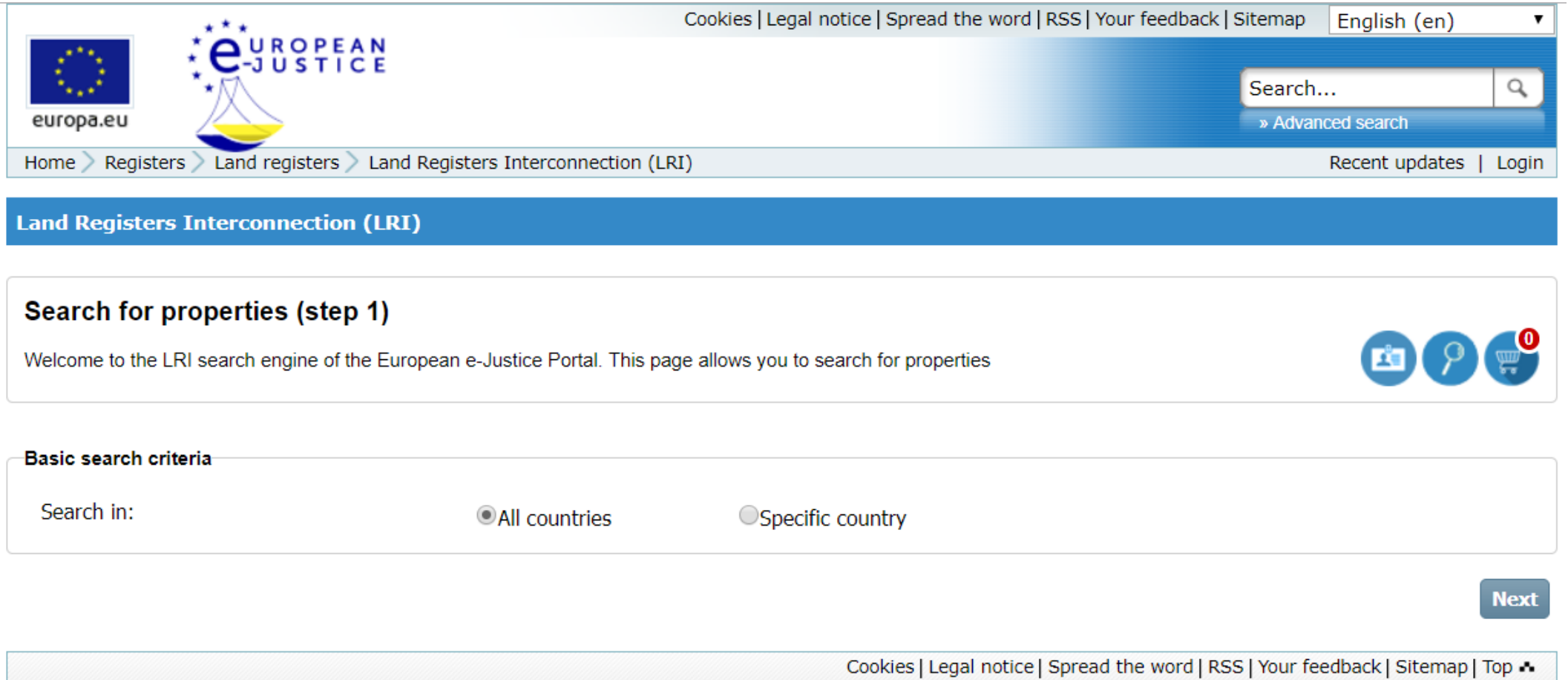
## The initial problem statement:

Currently several Member States in Europe are providing web-based search mechanisms for querying data and documents on national land registers.

However, these services may be accessible only nationally, or on a limited basis and in national language only – not satisfying the needs of citizens, companies and legal professionals in other Member States.



Two types of search forms: pan-European search form (All countries) and country specific search forms:



The screenshot shows the main LRI search page. At the top, there is a navigation bar with the Europa.eu logo, the European e-Justice logo, and a search bar. The search bar contains the text "Search..." and a magnifying glass icon. Below the search bar, there is a link to "Advanced search". The navigation bar also includes links for "Cookies", "Legal notice", "Spread the word", "RSS", "Your feedback", and "Sitemap". The language is set to "English (en)".

The main content area is titled "Land Registers Interconnection (LRI)". Below this, there is a section for "Search for properties (step 1)". The text reads: "Welcome to the LRI search engine of the European e-Justice Portal. This page allows you to search for properties". To the right of this text are three icons: a person icon, a magnifying glass icon, and a shopping cart icon with a red notification bubble containing the number "0".

Below the welcome message, there is a section for "Basic search criteria". It contains a "Search in:" label and two radio buttons: "All countries" (which is selected) and "Specific country".

At the bottom right of the search criteria section, there is a "Next" button. At the very bottom of the page, there is a footer with links for "Cookies", "Legal notice", "Spread the word", "RSS", "Your feedback", "Sitemap", and "Top".

## Actions taken under the project „LRI MS Connection“:

**Work Package 2 (WP2): Business analysis and solution design for LRI requests/responses**

**Work Package 3 (WP3): Development, test and deployment of national LRI components for LRI requests/responses**

Including the following activities:

- Mapping of the LRI search fields to the national LR data.
- Mapping of the LRI requests/responses to national LRs.
- User stories, the need for various data and documents.
- Design of the country-specific search forms



## How we started and which steps we took during the project?

1. Found out, which fields are nationally supported and which are not.
2. Discovered and discussed issues of concern in the process of creating national search forms.
3. Made a choice, which search fields will be provided at the national search forms.



## Step 1: Finding out, which fields are nationally supported.

### **Selecting the general options:**

Allowing search by owner (Yes, No): Yes

For professionals only (Yes, No): No



## Step 1: Finding out, which fields are nationally supported.

### Selecting fields for the country-specific search forms:

Property owner:

Individual:

#### ESTONIA

- ✓ Person ID
- ✓ First name
- Middle names
- ✓ Surname
- ✓ Date of Birth

#### AUSTRIA

- Person ID
- ✓ First name
- Middle names
- ✓ Surname
- ✓ Date of Birth

It is typical for Estonia to search using the identification code.



# Search by Property Owner as an Individual

## ESTONIA

Search as:

Individual

Company

Person ID:

First name:

Surname:

Date of birth:

day:

month:

year:

## AUSTRIA

Search as:

Individual

Company

First name:

Surname:

Date of birth:

day:

month:

year:



## Selecting fields for the country-specific search forms:

Property owner:

Company:

### ESTONIA

- ✓ Company ID
- ✓ Company name

Search as:

Individual

Company

Company ID:

Company name:

### AUSTRIA

- Company ID
- ✓ Company name

Search as:

Individual

Company

Company name:



## Selecting fields for the country-specific search forms:

Property address:

### ESTONIA

- ✓ Province
- ✓ Municipality
- ✓ Street name
- ✓ House number
- Building name
- Postal code
- Floor number
- ✓ Apartment number

### AUSTRIA

- ✓ Province
- ✓ Municipality
- ✓ Street name
- ✓ House number
- Building name
- Postal code
- Floor number
- Apartment number

Search by any desired part of the address in any address field.



## Selecting fields for the country-specific search forms:

Property ID and coordinates:

### ESTONIA

- ✓ Property ID
- Inspire ID
- Regional ID
- Parcel ID
- ✓ Cadastre ID
- Longitude
- Latitude

### AUSTRIA

- ✓ Property ID
- Inspire ID
- Regional ID
- ✓ Parcel ID
- ✓ Cadastre ID
- Longitude
- Latitude



## Selecting fields for the country-specific search forms:

Cost of search:

### ESTONIA

- ✓ No cost
- ✓ Fixed cost (future)
- Dynamic cost

### AUSTRIA

- ✓ No cost
- ✓ Fixed cost (future)
- Dynamic cost



## Free search results:

The following data is free-of-charge and may be included in the initial property data response to the LRI service data request: Address, ID-s.

**List of properties**

Country ▲	Address	Property ID	Further details	Available Documents
Estonia	Haapsalu linn, Kraavi	47632	<a href="#">View Details</a>	<a href="#">Available Documents</a>

Please select ▼   [Apply filters](#)

One record found. Page: **1**



## Which documents we have at the land register?

### ESTONIA

- **Excerpts of the land register data.**  
Not originally kept as document files.
- **Content of the property case file,**  
such as:
  - registration applications
  - contracts
  - floor plans, maps
  - court orders, decisions, and others.

Restrictions of access apply. Available only for owners of the property and persons with justified interests.

### AUSTRIA

- **Excerpts of the land register data.**  
Not originally kept as document files.
- **Documents are stored in the court files.**

A collection of property-related documents may only be obtained by multiple search request based on multiple search forms.

This require a good knowledge of the LR data structure.



## Step 2: Discovery and discussion of the issues of concern

### 3 major categories:

- 1) Issues with search fields and creating the national search forms
- 2) User interface issues
- 3) Display and interpretation of search results



## 1. Issues with search fields and creating the national search forms:

- Only few common fields for EU-wide search (All countries at once).
- Unsupported parameters in one or both countries: e.g. middle name, company ID.
- Some data is not stored in the land register, but in other registers instead. Interconnecting to other systems would need more advanced analysis and development. It was not initially planned in the project scope.
- Inapplicable data models for providing “one overall search”. Data held differently. Need to consider it in creating “close enough” search experience.





## 2. User interface issues:

- User journey and usage experience is somewhat bumpy.
- Not sufficient means to give guidance and feedback to the user. Meaning of labels, restrictions on conducting searches, or interpreting results.
- Partially translated interface as well as content. Mixture of content from various sources.
- Error codes of one country vs many countries, language of error codes and necessary translations.
- Users not aware of the country-specific aspects, like writing names or addresses.



### 3. Display and interpretation of search results:

- Currently the list of search results does not reveal any information on the owner of listed properties. From the user's perspective, there is no clear connection between the searched owner of property and the resulting list of properties.
- List of documents need to display more detailed information in order to make a proper selection of the necessary documents.
- Users need more guidance for interpreting the provided results properly.



## Step 3: Final choices and decisions in developing the country-specific search forms.

### ESTONIA

- There is one search form.
- User interface shows separate fields for the parts of an address. The search engine considers all fields as one.
- Middle name is considered as part of the full name.

### AUSTRIA

- There are many search forms.
- Only few search fields in each form.
- In the test environment the search functionality is free of charge. Otherwise requires a fee.



Time for questions and comments.

