



Interoperability Model for Land Registers

# IMOLA CLOSING CONFERENCE

IMOLA Template  
as interconnection tool within the scope of judiciary cooperation



Brussels 28<sup>th</sup> January 2016

Jesús Camy Escobar





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# Land Registry Interconnection Feasibility Study.

## SCOPE

- ❖ **Business analysis** about land register specificities in the 28 Member States and proposal for a possible LRI.
- ❖ **Technical study** to provide an overview of potential architecture solutions for LRI.
- ❖ Explore the possibilities for **handling payments**, when a fee is introduced for accessing data.

# Interconnection of land registers. Non paper by the French & the German delegations.

- ❖ The FS drops away the main issue of **the difference of legal systems and of nature of information** given by registers.
- ❖ The FS takes into consideration **only the economic and technical feasibility**, as well as extensively focusing the specific issue of **payment**.
- ❖ **The FS fails to offer a convincing analysis of how an interconnection would work.**

# Feasibility Study: sticking points.

**What information?**

**What semantic model?**

**What format?**

**What metadata?**

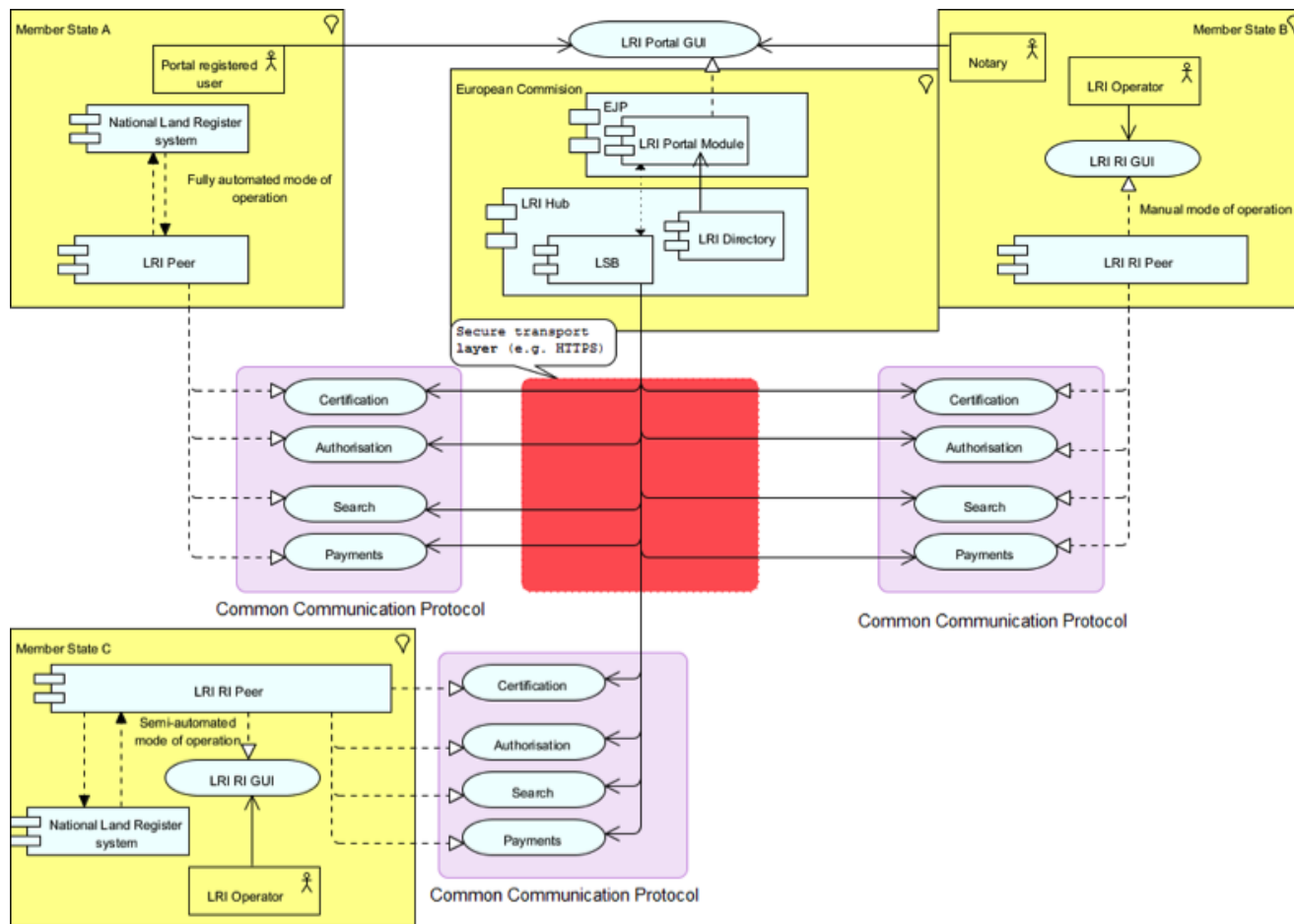
# European legal framework

- ❖ **The Treaty on the functioning of the European Union**
- ❖ **The Stockholm Program: towards a citizens' Europe in the area of freedom, security and justice. (2010/C 115/01).**
- ❖ **Multiannual European e-justice Action Plan 2014-2018. (2014/c 182/02)**

## IMOLA TEMPLATE AS EUROPEAN INTERFACE FOR LRI

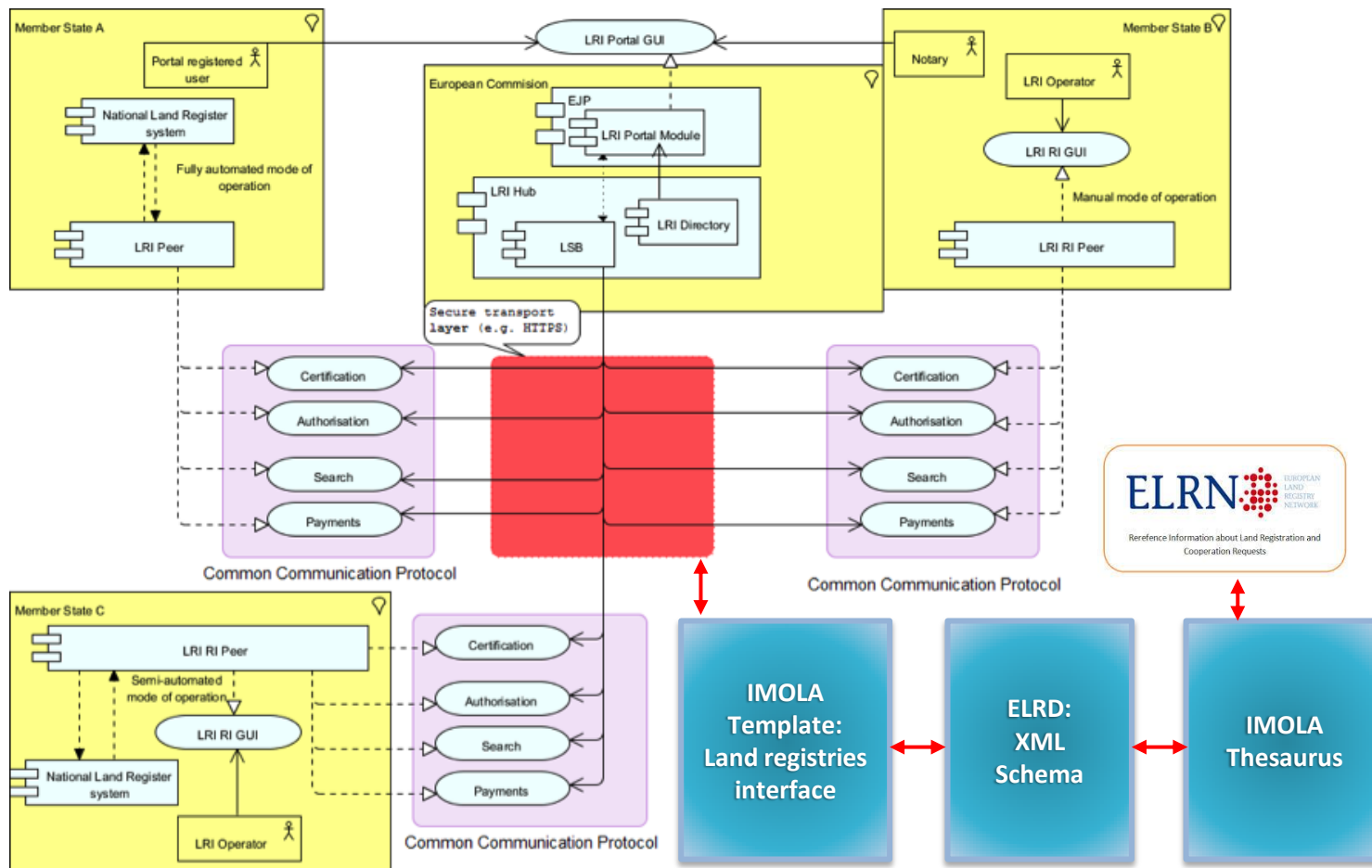
- ❖ **Develops a template for the European Land Registry Document (ELRD), using XML standar** (XML,XML scheme and XSL).
- ❖ **National LR Systems differences are respected:** flexibility principle.
- ❖ **Solution installed on voluntary basis over National LR Systems**
- ❖ **Data protection rules have to be observed.**

# FEASIBILITY STUDY: Portal develops its own solution

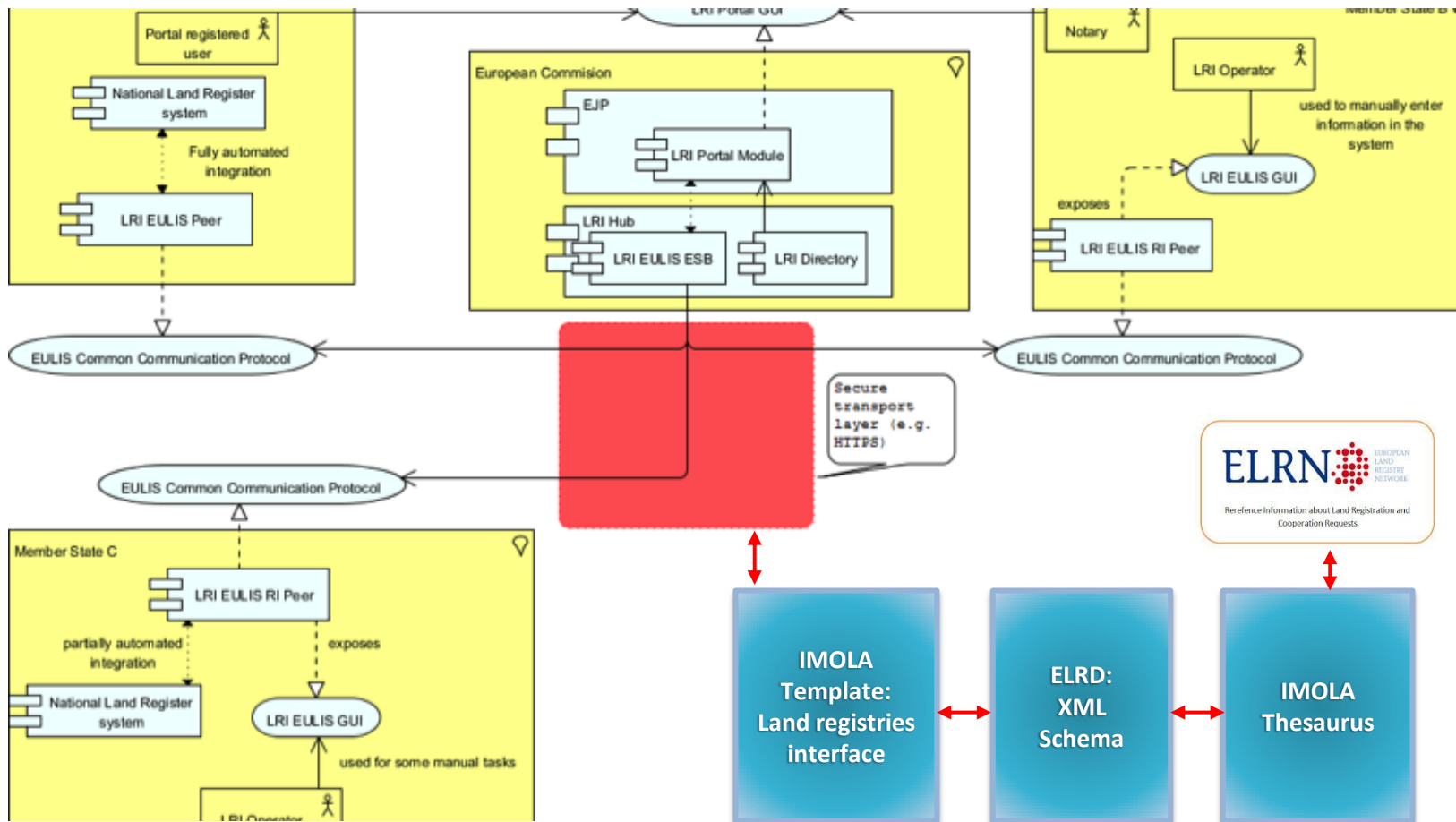




# FEASIBILITY STUDY: Option 1 complemented with IMOLA template



# FEASIBILITY STUDY: Portal integrates and extends the EULIS platform



## BROKER TO VERIFY THE SEMANTIC MODEL PROPOSED

- ❖ **Analyses the extracted information at national level.**
- ❖ **XML scheme next to a set of semantics validation rules.**
- ❖ **Styles sheets.**
- ❖ **Publication engine.**

# ELRD Document

## XML Definition

**ELRD(XML) + ELRD Schema (XSD) = ELRD**  
**Validated**

```
<?xml version="1.0"
encoding="UTF-8"?>
<elrd>
<land_registry_units>
...
</land_registry_units>
<proprietorship>
...
</proprietorship>
</elrd>
```

**ELRD**

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema>
  <xs:element name="elrd"><xs:complexType>
    <xs:sequence>
      <xs:element name="land_registry_units"> ...
      <xs:element name="proprietorship"> ...
    </xs:sequence>
  </xs:complexType>
</xs:element></xs:schema>
```

**ELRD Schema (XSD)**

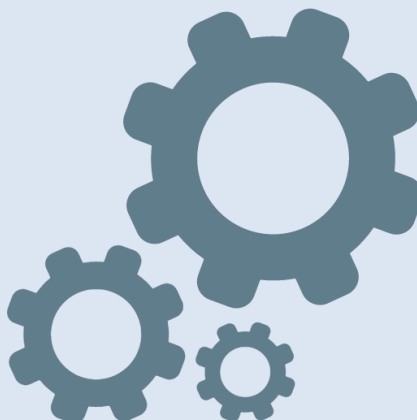


# ELRD Document

## XML Definition

ELRD(XML) + ELRD Stylesheet (XLS) = ELRD in PDF

```
<?xml version="1.0"
encoding="UTF-8"?>
<elrd>
<land_registry_units>
...
</land_registry_units>
<proprietorship>
...
</proprietorship>
</elrd>
```



## SEMANTIC MODEL FOR STANDARDIZED LR OUTPUT

**Semantic tables**

**Glossaries**

**Fact sheets**

**Thesaurus**

**Judicial cooperation and training: ELRN**

## INFORMATION MODEL: Thesaurus

- ❖ **Relate** ELRD placeholders with the legal concepts of each National LR System: specifics national glossaries and fact sheets.
- ❖ **Create** a website where users can check the meaning and legal effects of ELRD concepts in different MMSS
- ❖ **Builds** a standard information model to be use in other projects. Future IMOLA LRI core vocabulary....?

# Thesaurus: SKOS Features

- ❖ SKOS provides a model for expressing the basic structure and content of concept schemes such as thesaurus and other types of controlled vocabulary.
- ❖ As an RDF application allows concepts to be composed and published on the Web, and integrated into other concept schemes.
- ❖ The basics conceptual resources - **concepts** - are identified with URIs. Concepts relationships can be specified by means of labels.
- ❖ **Concepts** can also be mapped across concept schemes and grouped into labeled or ordered collections.



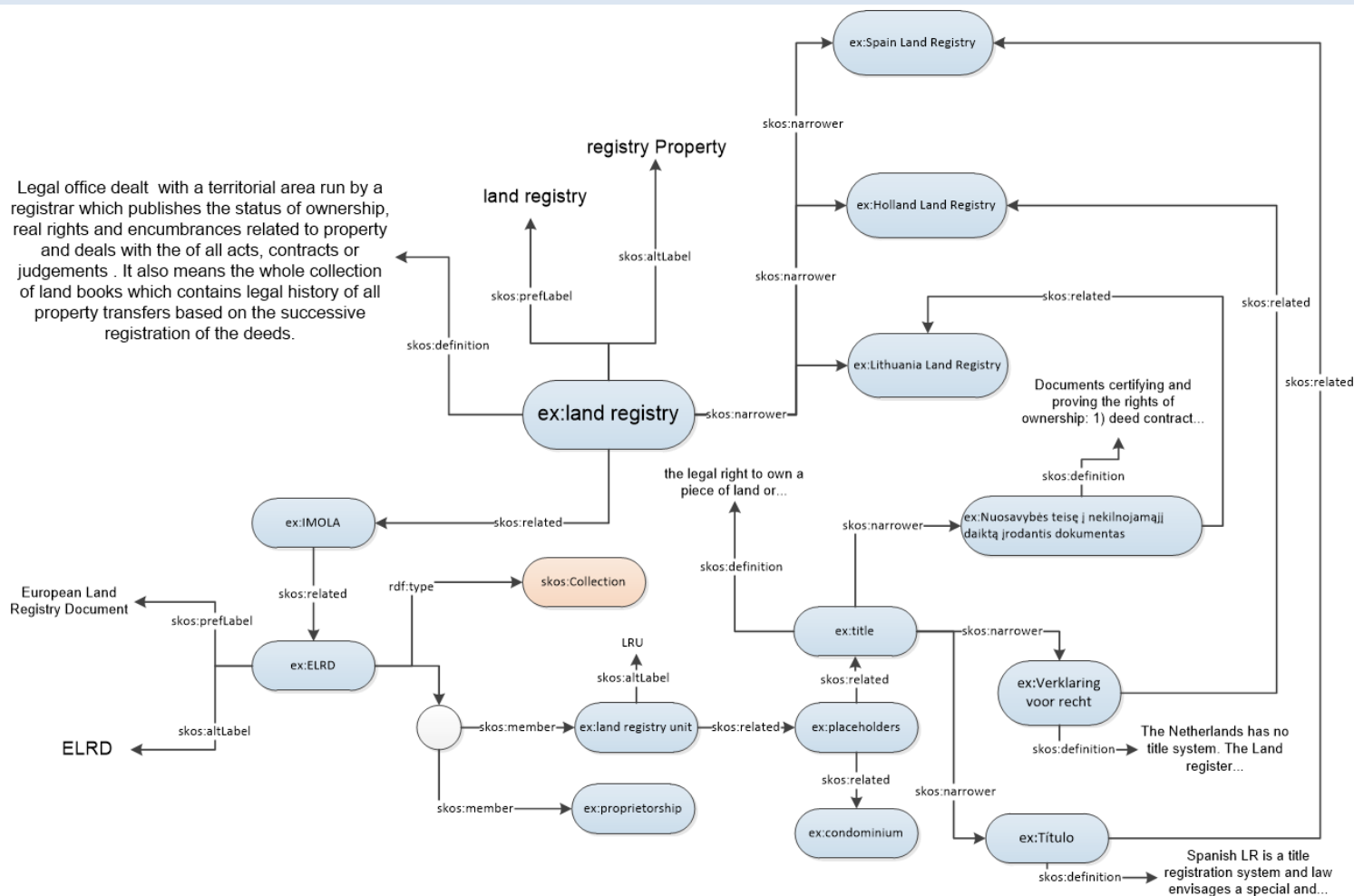
# Thesaurus: SKOS properties

## SKOS Categories

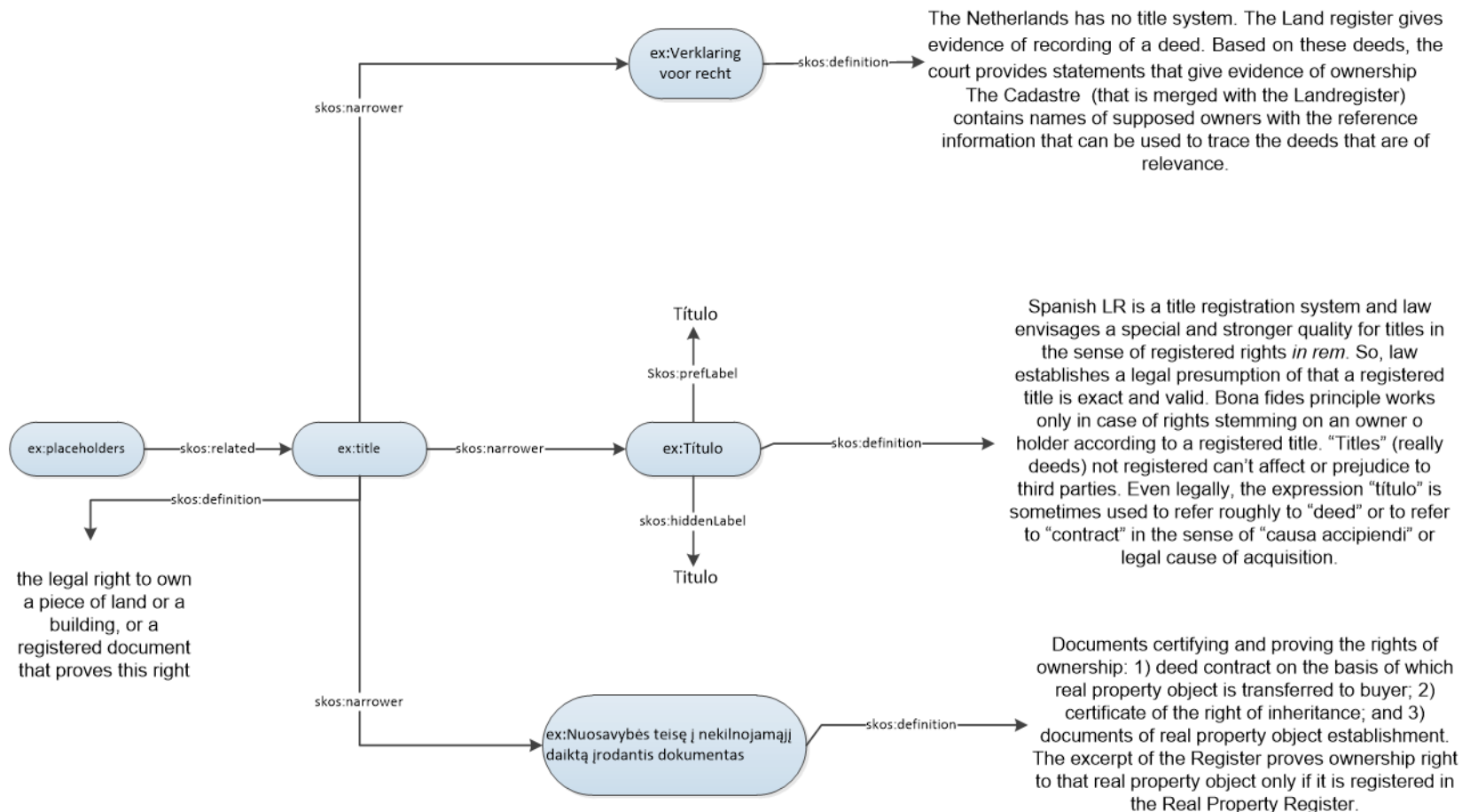
CONCEPTS	LABELS & NOTATION	DOCUMENTATION	SEMANTIC RELATIONS	MAPPING PROPERTIES	COLLECTIONS
Concept	prefLabel	note	broader	broadMatch	Collection
ConceptScheme	altLabel	changeNote	narrower	narrowMatch	orderedCollection
inScheme	hiddedLabel	definition	related	relatedMatch	Member
hasTopConcept	notation	editorialNote	broaderTransitive	closeMatch	memberList
topConceptOf		example	narrowerTransitive	exactMatch	
		historyNote	semanticRelation	mappingRelation	
		scopeNote			

# Thesaurus: SKOS map

Legal office dealt with a territorial area run by a registrar which publishes the status of ownership, real rights and encumbrances related to property and deals with the of all acts, contracts or judgements . It also means the whole collection of land books which contains legal history of all property transfers based on the successive registration of the deeds.



## Thesaurus: comparative scheme



## Placeholder: Condominium

It is the form of housing tenure and other real property where a specified part of a piece of real estate (usually of an apartment house) is individually owned. “a piece of land or facility common to several property units.

**ELRA FACT SHEET:** [See ELRA glossary](#)

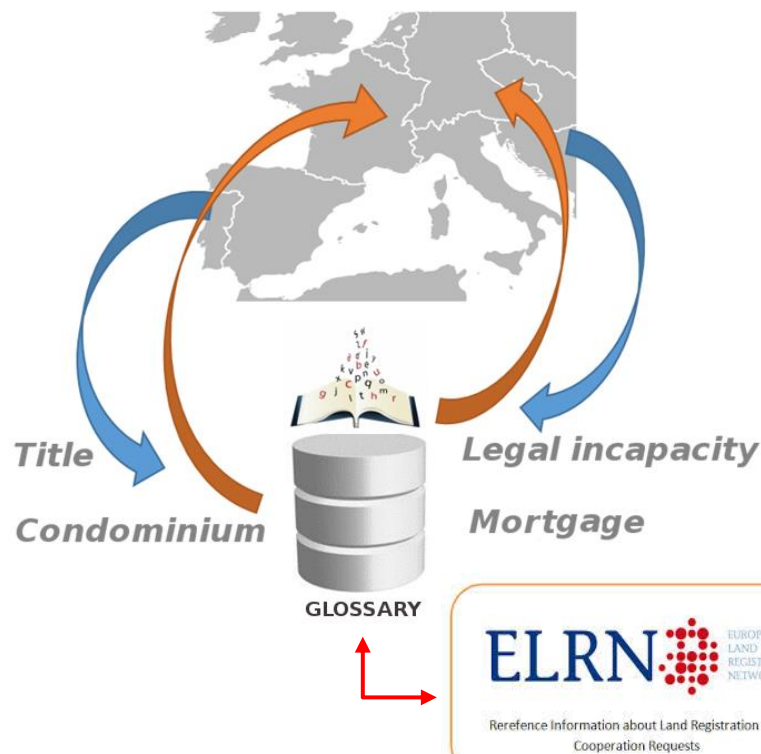
Netherlands: Verklaring voor recht	Spain: Propiedad Horizontal	Lithuania: Susitarimas, pagal kurį nekilnojamas daiktas yra
<p>The Netherlands has no title system. The Land register gives evidence of recording of a deed. Based on these deeds, the court provides statements that give evidence of ownership</p> <p>The Cadastre (that is merged with the Landregister) contains names of supposed owners with the reference information that can be used to trace the deeds that are of relevance.</p>	<p>If property units are apartments, this legal situation or condominium is named “propiedad horizontal” or horizontal property. Apartments are singular and separately entered in the landbooks with their singular registry number and must have two indications which mean their relationship with a building horizontally divided: a special number of order in this latter and an quota or average in the common elements of the building. Anyway, each apartment real folio will keep its relationship with a building indicating data of source real folio or main entry of the building. There are more complex kinds of condominium or commonhold like “complejos urbanísticos” for organising ownership in housing estates. If ownership were divided not into apartments but quotas or averages, we’d refer to “comunidad de bienes”, “copropiedad” or “condominio”.</p>	<p>Such term does not exist in Lithuanian law.</p>
<p><b>NATIONAL FACT SHEET:</b> <a href="#">See Netherlands glossary</a></p>	<p><b>NATIONAL FACT SHEET:</b> <a href="#">See Spain glossary</a></p>	<p><b>NATIONAL FACT SHEET:</b> <a href="#">See Lithuania glossary</a></p>

# Thesaurus: Words grouped together with the same meaning

## IMOLA mini-Thesaurus:

A generic IMOLA glossary

A specific glossary of each country integrated on IMOLA platform

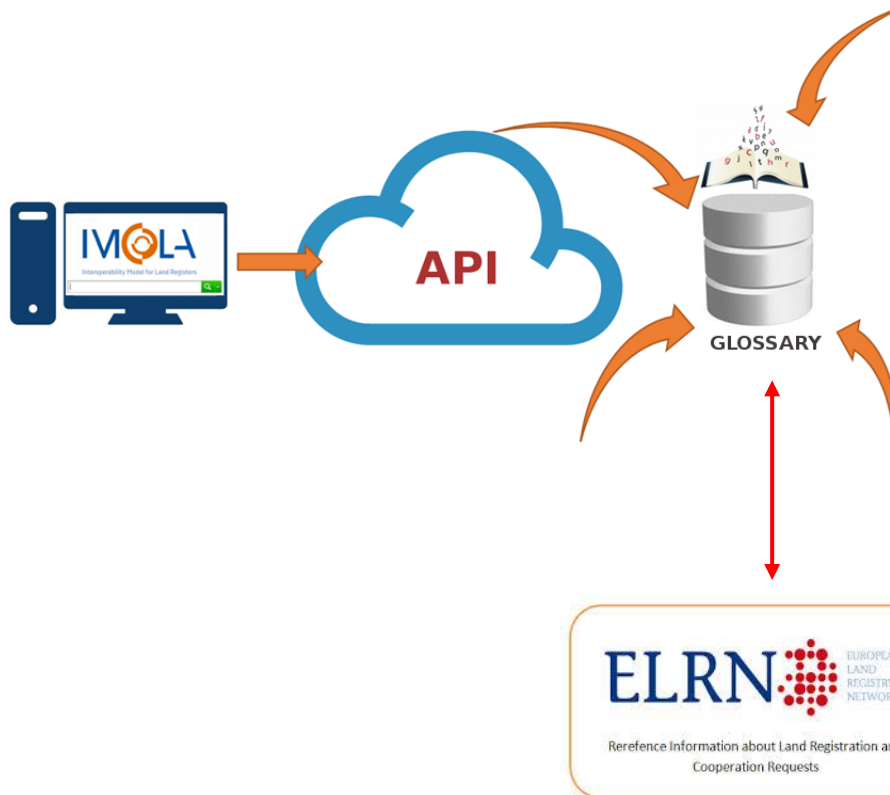


# **IMOLA** mini Thesaurus two main goals

Interoperability Model for Land Registers

**Web site where users search the meaning and relations of terms**

**API to be invoked by web services in order to make use of the Thesaurus information**



## JUDICIAL COOPERATION PROJECT

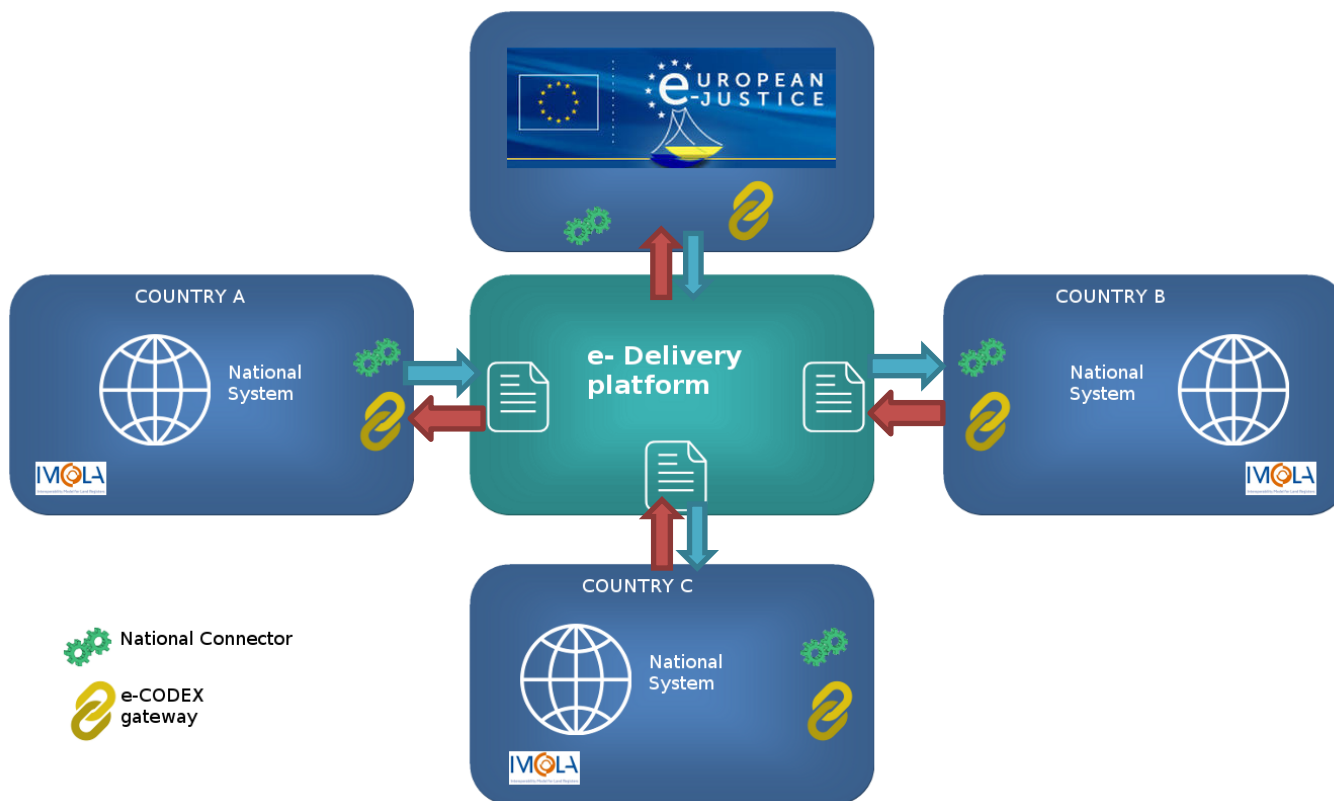
- ❖ Implementation of EU legal Instruments on civil matters.
- ❖ European area of justice: Mutual recognition and adaptation principles.
- ❖ Facilitate the exchange of data and cross border proceedings
- ❖ Training and knowledge about legal foreign LR systems.
- ❖ International cooperation: European land Registry Net. (ELRN).

## IMOLA ONE STOP SHOP TO ACCESS E.JUSTICE

- ❖ IMOLA a pan European Large Scale Project.
- ❖ Unify access to National LR disclosure through e-Justice Portal.
- ❖ Solution installed on voluntary basis over each National LR.
- ❖ System compatible with e.Codex Platform.



# IMOLA a pan European Large Scale Project. E. Codex Building Blocs



## INTEROPERABILITY

- ❖ **IMOLA Interoperability:** (ELRD), using XML Standards (XML, XML scheme and XSL).
- ❖ Alignment with ISA program.
- ❖ Reuse European core vocabularies.
- ❖ Can IMOLA be a trigger for European property rights core vocabulary?



# Interoperability

Interoperability Model for Land Registers

## Standard alignment with ISA and Core Vocabularies

### CORE PERSON

- Name
- Gender
- Date of birth
- ...

### PERSON CORE VOCABULARY

- Identifier
- Activities
- ...

### CORE LOCATION

- Address
- A geographic name or geometry
- ...

### IMOLA CORE VOCABULARY

- LRI property rights
- Semantic model
- Thesaurus

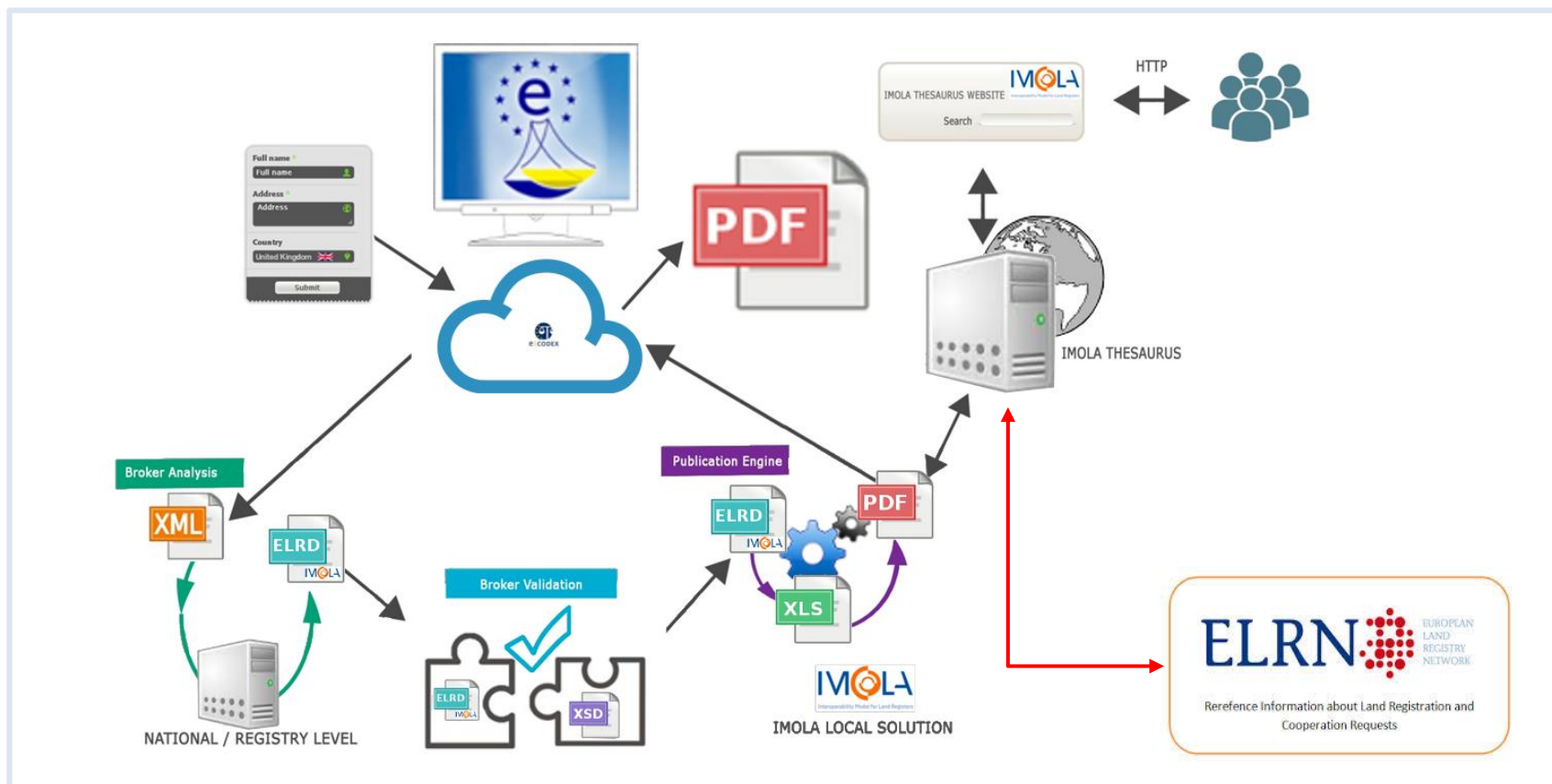
### CORE PUBLIC SERVICE

- Service offered by a public administration

## RESPECT TO DIFFERENT NATIONAL LR SYSTEMS

- ❖ Information on legal ownership should be provided only by the national agency or administration in charge of the property rights registration.
- ❖ Territorial complementary information could be included in the Portal, as long as it has been sent and linked with the land registry unit by the administration in charge of the property rights register.
- ❖ Match placeholder information: key registers

# IMOLA Architecture overview



# IMOLA & IRI

