Building the Legal Knowledge Graph for Smart Compliance Services in Multilingual Europe

Lynx

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EU Networking session within Extended Semantic Web Conference (ESWC) 2018
Crete, Greece, June, 5\textsuperscript{th}, 2018

http://lynx-project.eu/

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OBJECTIVE

To create an ecosystem of smart cloud services to better manage compliance, based on a legal knowledge graph which integrates and links heterogeneous compliance data sources including legislation, case law, standards and other private contracts.
FACTSHEET

• ICT14-2016-2017 / Innovation Action / Horizon 2020
• Grant Agreement number: 780602
• BDV-PPP: cross-sectorial and cross-lingual data integration and experimentation

• Duration: 36 months
• Starting date: December 1, 2017
• Project Cost: €3,638,065.00
• EU Contribution: €2,959,247.52
• Project Officer: Johan Bodenkamp
European SMEs

[Map of the world with various colors indicating different regions]

[Two figures engaged in a sale transaction]

[Logo: Lynx]
European SMEs
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Compliance
PROPOSED SOLUTION
Smart Services for Compliance

search, linking, recommender, semantic annotation, extraction, translation, summarization, recommender

Legal Knowledge Graph

Vocabularies
Indexed documents

data source specific importers

Annotation
Linking
Translation

Public access
Open documents, simple interface

Developer access
Freemium HTTP Rest API

Professional access
Specific access and data integration

Annotation
Linking
Translation

data source specific importers

Legal resources
International Standards
Language resources
Open Data
Private documents
EUROPE IS ALREADY VERY SEMANTIC!

Every European Law has a URI (European Law Identifier)
Every European judgement has a URI (European Case Law Identifier)
LEGAL KNOWLEDGE GRAPH

**European Directives**
General legal goals for every European Member State

**Case law**
Judgements, sentences

**National Legislation**
Every Member State has different national and regional legislation in force

**European Regulations**
Legislative act binding in every European Member State

**Industry standards**
Technical documents in occasions necessary to achieve certification
2: Labour law

Labour law is different in every country in Europe.

A Finnish company opens a new factory in Germany. What are the equivalent norms there? Which kind of protections should my workers use?
t 3a: CE Marking

The CE mark is a symbol that indicates a product complies with the relevant EU legislation. It certifies conformity with health, safety and environmental protection.

Given a certain product, a certain jurisdiction and a certain usage... which European Directives and Technical Standards could I comply with?
1: Data Protection

Company managing hundreds of contracts…

Which clauses are sensitive regarding data protection?
REQUESTED INPUT/OUTPUT

— Data resources in the legal domain, preferably RDF and Linked Data. Software resources to store, serve and implement the Legal Knowledge Graph.

— Application cases, in the areas of data protection, labour law and standards compliance.

— Know-how from previous efforts.
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