EUCases’ aim

• The goal of the project is to create a unique Pan-European legal platform – **EUCases Linking Platform**, and services linking law and case law of Member States to European Union legal system, thus providing access and search facilities at the European level.

• It transforms multilingual *legal open data* into *linked open data* after *semantic and structural analysis* to improve their usability and retrieval.

• State of the art Natural Language Technologies will be used.
A technology transfer project

- Outcome for the participating SMEs working in the legal information provision sector
  - a portfolio of innovative **data analysis and human language technology components** for elaborating legal documents,
  - resulting from the collaboration with the research partners and the advisory board members
  - in order to **create innovative high tech value-added services** and products in their market
  - addressing the needs of nearly a million users:
    - legal professionals (judges, lawyers, etc.) and
    - legal information providers/publishers redistributing the linked open data
  - market analysis and exploitation plan
• It will download, **reuse** and **enrich** the millions of legal documents and open access doctrinal work: European and national legislative and case law (high courts and appeal courts) portals of 6 Member States (AT, BG, DE, FR, IT, UK)
  – EUR-Lex (EU),
  – Legifrance (FR),
  – legislation.gov.uk (UK),
  – Supreme Court (UK),
  – Bundesgerichtshof (DE), Gesetze im internet (DE),
  – Rechtsinformationssystem (AT),
  – Supreme Court of Cassation (BG), Supreme Administrative Court (BG),
  – Normattiva (IT), Consiglio di Stato (IT), Corte di Cassazione (IT), DOAJ (Directory of Open Access Journals)
The technologies
Technologies used

• Structuring legal documents:
  – Legal XML: Akoma Ntoso
  – Naming of documents: ELI/ECLI
  – NLP parsers for translation in XML and linking, NER

• Semantic enrichment:
  – Multilingual ontologies (Eurovoc and Legal Taxonomy Syllabus)
  – Text to ontology linking
  – Automated classification
  – Automated summarization
  – Automated translation

• Open data: SPARQL
Overview

EUCases Linking Platform

Language technologies
- Structural interlinking
  - Identifiers: EUI, ECLI, national
  - Tools for linking, LT2XML converters
  - Metadata extraction
  - Tools for case annotation
- Semantic interlinking
  - Eurovoc thesaurus
  - Syllabus ontology, ontology indexer
  - Ontology-to-text processing
  - Multilingual access
  - Classification

Multi-lingual database
EN, DE, FR, IT, BG

Legal open data
EU legislation
EU case law

Data analysis and linking

Value added tools & services

SMEs' value added products
ConsumerCases
- Web Application
- Consumer protection law
  - Access to a multilingual collection of tens of thousands cross-linked resources
EULinksChecker
- Add-in tools
  - for browsers, text editors and viewers
Legal linked open data
- Courts, law firms, data providers, publishers, open data re-users

User testing & validation/Exploitation plan

Legal doctrine
Consortium representatives

Empirica GmbH
- Karsten Gareis, Coordinator
- Dr Veli Stroetmann, Deputy Coord.
- Strahil Birov, Exploitation, BM
- Klaus Piesche, Dissemination

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- Dr Livio Robaldo, Project team member
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- Dr Kornél Markó, Task Leader
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- Dr Andrea Violato, NOMOTIKA, Project team member

NOMOTIKA
- Carlo Cugusi, Project team member
Key Achievements

10/2013  First Project Year  
- Crawler tools
- NLP toolkit
- LT2XML conversion tools
- Linking tools
- Knowledge representation module
- Tools for classification and case summarisation

Second Project Year  09/2015
- ConsumerCases web application
- EULinksChecker add-in tools
- EUCases linked open dataset & EUCases Linking Platform SPARQL end-point

06/2014  09/2014  06/2015
Main project outcomes:
• Consumer Cases Application
• EU Links Checker add-ins
• Legal Linked Open Data Set

Other project outcomes:
• NLP Toolkit
• EuroVoc Classifier
• Case summarisation module
• Machine translation module

Further services building on project outcomes:
• EuroCases Application
  o APIS will further invest in an added value online service with enhanced content and functionality
  o Planned launch in October 2015