



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

D6.6 Final report on communication activities

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|---------------------------------|---|
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ACRONYMS LIST

BDVA: Big Data Value Association
LynxSP: Lynx Services Platform

EXECUTIVE SUMMARY

The aim of this document is to report on the communication activities carried out during the Lynx project lifespan (from M1 to M40). This deliverable builds up on D6.1 “Website, project identity set, and communication plan” [1] and on D6.3 “Intermediate report on communication activities” [2]. The communication plan released in D6.1 has been updated throughout the whole project lifespan as new inputs emerged. D6.3 was an intermediate report delivered in M18, therefore, the submitted content has been updated and, when necessary, new materials have been added.

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1 INTRODUCTION

This document collects and reports communication activities carried out during the lifespan of the Lynx Project. It elaborates upon the Deliverable D6.3 “Intermediate report on communication activities” [2] and the communication plan released in D6.1 “Website, project identity set, and communication plan” [1]. D6.1 provided guidance to project partners regarding the communication activities, plans, methodologies, objectives and relevant audiences. The main purpose was to make the Consortium aware of the importance of the communication plan for making the Lynx project successful. On top of that, D6.3 provided an intermediate report on communication channels, communication strategy and reviewed the communication plan.

The outbreak of the COVID-19 pandemic hit Europe in M27 (February 2020) of the Lynx project. Therefore, all face-to-face meetings have deeply suffered the consequences of the pandemic, causing the postponement or even cancellation of some of the main conferences, workshops, fairs, and face-to-face meetings. Consequently, the Lynx team has reshaped some parts of the communication activities. The communication activity that has suffered the greatest impact of the pandemic is the Lynx final event that was reported on D6.3 Section 5.2. This activity has been replaced with a series of 4 online webinars that go through the Lynx Legal Knowledge Graph, the Lynx architecture, the Lynx Services Platform (LynxSP) and the services available into the Lynx platform. All these webinars are publicly available on the Lynx YouTube channel.

Therefore, this document reports on communication channels and contents used to spread the Lynx’s achievements and results. Section 2 shows the project’s website and its different parts devoted to general information, publications, resources, news, dissemination and communication; Section 3 reports on the Lynx social media: Twitter, LinkedIn, SlideShare and YouTube; Section 4 is focused on the Lynx newsletter issues and shows details such as send dates and links to the issues PDF versions, and also lists the Lynx contribution to other newsletters; Section 5 collects the events attended and organized by Lynx partners and shows the press releases sent during the project lifespan; Section 6 is focused on the series of 4 webinars conducted by the Lynx partners; and, finally, Section 7 points out some conclusion regarding the communication activities in Lynx.

This document contains a revision log table. It reflects any update, the date of the new revision and the author.

2 WEBSITE

The Lynx's website was created and launched in the first months of the project's life, as it has been already reported in D6.1 [1]. In 2020, the number of visits to the Lynx website on average was 223 visitors per month. Since its release, the Consortium has continuously updated its content. The current navigation scheme is:

- landing page
- project (Section 2.1)
 - relevant information about the project
 - consortium
 - summary of the project's objectives
 - pilot's description
 - legal notice
 - related initiatives
- publications (Section 2.2)
 - public deliverables
 - articles
- resources provided by the Lynx project (Section 2.3)
 - data models
 - data portal
 - documents
 - services API
 - ontologies
 - terminologies
 - SPARQL
 - Domain Independent Vocabularies
- news related to Lynx (Section 2.4)
- join us (Section 2.5)
 - contact form
 - events calendar
 - form to subscribe to the Lynx newsletter
- webinars (Section 2.6)

The landing page of the Lynx project is depicted in Figure 1. It is composed of several parts, from top to bottom:

- menus top bar
- Lynx logo and full title
- objectives of the project
- main pillars of the project: smart services, legal knowledge graph and multilingualism
- a picture that shows a model of the LKG
- pilot's brief description and a link to their specific page into the Lynx's website
- funding information
- legal notice and terms of use

The rest of the sections within the Lynx project website are reported into the next sections.

PROJECT ▾ PUBLICATIONS ▾ RESOURCES ▾ NEWS JOIN US ▾ WEBINARS

Compliance made easy

Legal Knowledge Graph for Multilingual Compliance Services

Mission

The main objective of Lynx is to create an ecosystem of smart cloud services to better manage compliance, based on a legal knowledge graph (LKG) which integrates and links heterogeneous compliance data sources including legislation, case law, standards and other private contracts.

⚖️

Smart Services

One-stop shop for SMEs and large enterprises operating internationally

🌐

Legal Knowledge Graph

Law and regulatory open data interlinked and offered through a set of cross-sectorial, cross-lingual services

🌍

Multilingualism

Better access to compliance-related information for citizens in multilingual Europe.

The diagram shows a network of interconnected nodes representing various legal and compliance data sources. Nodes include: Users, Decisions, Metadata, Data and Multimedia, Courts, Law, Legal Information, Directives & Regulations, CE Labels, Standards (ISO et al), Ontologies, Vocabularies, Taxonomies, Thesauri..., and Contracts, other Customer content and data. A red box labeled 'Secure Access Layer' highlights the connection between 'Users' and 'Contracts, other Customer content and data'.

Pilots

Three pilots have been designed to put in action the Lynx Legal Knowledge Graph.

🤝

Contracts

Compliance Assurance Services in Contracts. [Read more.](#)

🔧

Labor Law

Compliance Assurance Services in Labour Law. [Read more.](#)

💡

Oil & Gas and Energy

Compliance Assurance Services in Oil & Gas and Energy. [Read more.](#)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780602

Website developed by OEG-UPM, Legal information

T3 Framework
Modern and Flexible Framework

Bootstrap is a front-end framework of Twitter, Inc. Code licensed under MIT License.
Font Awesome font licensed under SIL OFL 1.1.

Figure 1 Lynx website landing page

2.1 PROJECT

The project section in the Lynx website shows relevant information about the project:

- the Consortium¹
- summary about the background and objectives of the project²
- Pilots' motivation and objectives are also described in the Lynx website
 - Compliance Assurance Services for Contracts³
 - Compliance Assurance in Oil & Gas and Energy⁴
 - Compliance Assurance Services in Labour Law⁵
- A complete description regarding the three pilots that will be implemented in Lynx
- Legal notice and privacy policy⁶
- Related initiatives⁷

2.2 PUBLICATIONS

Publications are also a main pillar in the communication strategy. These publications enable communication among the partners of the consortium and different target audiences considered in D6.1 [1]: academia, SMEs, LEs and EU citizens. The publications section in the Lynx website includes public report deliverables, articles (coming from conferences and workshops attended and organized by Lynx partners), press releases and Lynx newsletter issues (PDF versions).

2.2.1 Public deliverables

In order to fulfil the H2020 requirements, public deliverables require Open Access to be provided free of charge by Lynx partners; thus, making it possible for third parties to access, mine, exploit, reproduce and disseminate the results obtained (see deliverable D2.1 [3]). Therefore, all public deliverables are uploaded to Zenodo⁸ and linked in the “Public report deliverables” Lynx website page⁹. The statistics of views and downloads from the Lynx Zenodo community are reported on Table 1.

| Deliverable name | Views ¹⁰ | Downloads ¹¹ |
|--|---------------------|-------------------------|
| D1.1 Functional Requirements Analysis Report | 220 | 950 |
| D1.2 Technical Requirements Analysis Report | 131 | 186 |
| D1.3 Technical Architecture Design | 166 | 128 |
| D1.4 Setup and implementation of the basic platform | 161 | 127 |
| D2.1 Initial Data Management Plan | 177 | 191 |
| D2.2 Intermediate Report on Lynx acquired vocabularies | 120 | 93 |

¹ <http://lynx-project.eu/project/consortium>

² <http://lynx-project.eu/project/summary>

³ <http://lynx-project.eu/project/pilot1>

⁴ <http://lynx-project.eu/project/pilot2>

⁵ <http://lynx-project.eu/project/pilot3>

⁶ <http://lynx-project.eu/project/legal>

⁷ <http://lynx-project.eu/project/legal>

⁸ <https://zenodo.org/communities/lynx>

⁹ <http://lynx-project.eu/publications/deliverables>

¹⁰ Last update: 26.03.2021

¹¹ Last update: 26.03.2021

| | | |
|--|--------------|--------------|
| D2.3 Intermediate Report on Lynx acquired corpora | 95 | 97 |
| D2.4 Data Management Plan | 131 | 111 |
| D2.5 Report on Lynx acquired vocabularies | 64 | 73 |
| D2.6 Report on Lynx acquired corpora | 61 | 73 |
| D2.7 Catalogue of relevant legal and regulatory datasets | 94 | 72 |
| D3.1 Intermediate extraction and linking services | 216 | 140 |
| D3.2 Intermediate translation services | 136 | 125 |
| D3.3 Intermediate summarisation and annotation services | 250 | 171 |
| D3.4 Intermediate information retrieval and recommender services | 199 | 129 |
| D3.5 Initial platform prototype | 38 | 44 |
| D3.6 Extraction and Linking services | 99 | 81 |
| D3.7 Translation services | 51 | 51 |
| D3.8 Summarisation and annotation services | 55 | 45 |
| D3.9 Information Retrieval and Recommender Services | 153 | 123 |
| D3.10 Final platform prototype | 29 | 26 |
| D4.1 Pilots Requirements Analysis Reports | 211 | 143 |
| D4.2 Initial version of workflow definition | 84 | 71 |
| D4.3 Final version of Workflow definition | 104 | 82 |
| D4.4 Initial implementation and report of Data and Content Curation Services | 39 | 49 |
| D5.1 Intermediate demonstrator for pilot 1 | 77 | 75 |
| D5.2 Intermediate demonstrator for pilot 2 | 74 | 60 |
| D5.3 Intermediate demonstrator for pilot 3 | 64 | 90 |
| D5.4 Testing and evaluation plan | 35 | 37 |
| D5.5 Demonstrator for pilot 1 | 28 | 26 |
| D5.6 Demonstrator for pilot 2 | 28 | 20 |
| D6.1 Website, project identity set, and communication plan | 253 | 185 |
| D6.3 Intermediate report on communication activities | 97 | 53 |
| Total | 3,740 | 3,927 |

Table 1 Lynx public deliverables views and downloads in the Lynx Zenodo Community

2.2.2 Articles and press releases

Moreover, the “Articles” section¹² in the Lynx website lists the 38 works published by the Lynx partners in:

- Workshops
- Conferences
- Journals
- Books
- Doctoral consortium papers
- Proceedings edited

¹² <https://www.lynx-project.eu/publications/articles>

Finally, the press releases and Lynx newsletter issues are also collected and published in this page. Specifically, Section 4.1 addresses the Lynx newsletter issues sent during the project lifespan.

2.3 RESOURCES

This part of the Lynx website is where the resources developed by Lynx partners become available in order to make them openly accessible. The publication of these resources is based on a strategy that relies on two main pillars: i) to communicate project achievements to stakeholders; and ii) to ease the engagement of these stakeholders to the project.

The resources that the Lynx project partners make available are:

- [Data model¹³](#). The ontology that serves as data model for the documents related to compliance implemented by the Lynx project partners
- [Data portal¹⁴](#). Collection of datasets that can be queried.
- [Multilingual Legal Knowledge Graph¹⁵](#). Demonstrator on how to access legislation as data within the Multilingual Legal Knowledge Graph.
- [Services¹⁶](#). This section contains the description, definition, tutorials, examples and demonstrators of the services available (APIs).
- [Related ontologies¹⁷](#). List of related ontologies.
- [Terminologies¹⁸](#). The terminologies specifically generated from each pilot corpus with the help of Tilde's Terminology Services and other Natural Language Processing techniques.
- [SPARQL¹⁹](#). Virtuoso SPARQL Query editor to query the Legal Knowledge Graph.
- [Domain Independent Vocabularies²⁰](#). Domain-independent vocabularies in Lynx provide a common catalogue of word meanings which allow to traverse semantically annotated documents from different domains.

2.3.1 Data model

The Legal Knowledge Graph Ontology is an ontology of documents related to compliance that serves as a data model for documents in the Lynx project. This ontology has been created with the purpose of supporting the representation of Lynx Documents. These Lynx documents are compliant with NIF²¹ (NLP Interchange Format) specification and heavily reuse ELI²² metadata elements. The implementation of this data model has considered other ontologies discussed in Section 2.3.5. Figure 3 shows a screenshot of the data model definition for the Lynx ontology of documents.

The Lynx project is about providing better services on compliance. The added value of the Lynx services revolves around a better processing of heterogenous, multilingual documents in the legal domain. Hence,

¹³ <https://www.lynx-project.eu/doc/lkg/>

¹⁴ <http://data.lynx-project.eu/>

¹⁵ <http://lkg.lynx-project.eu/>

¹⁶ <https://lynx-project.eu/doc/api/>

¹⁷ <https://www.lynx-project.eu/data2/reference-ontologies>

¹⁸ <http://lkg.lynx-project.eu/kos>

¹⁹ <http://sparql.lynx-project.eu/>

²⁰ <https://lynx-project.eu/data2/domain-independent-vocabularies>

²¹ <https://github.com/NLP2RDF/ontologies>

²² <https://op.europa.eu/en/web/eu-vocabularies/eli>

the most important document is the Lynx Document. Lynx Documents may be grouped into Collections and may be enriched with Annotations. Thus, the main entities to deal with are three:

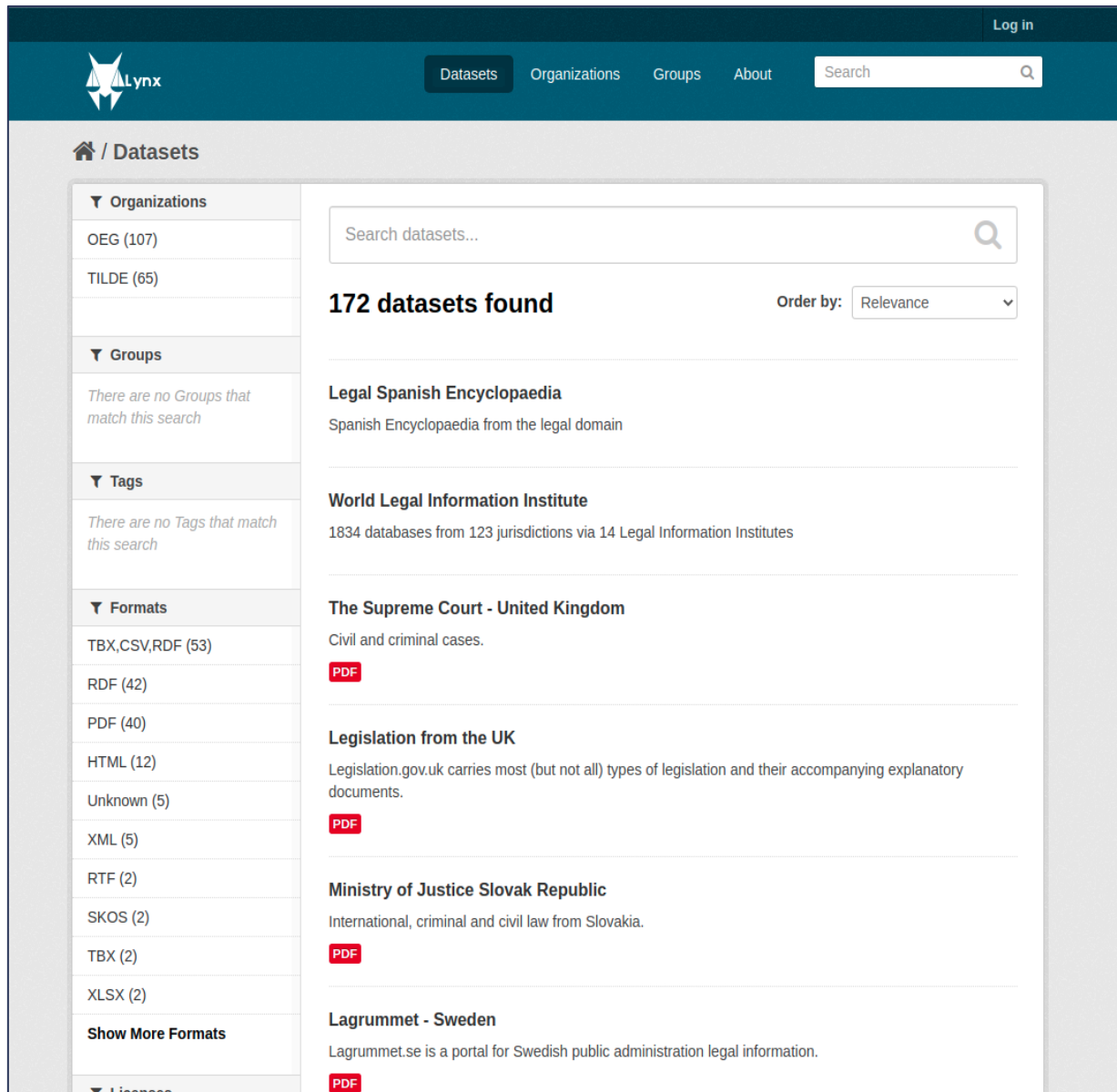
- Lynx Documents are the basic information units in Lynx: identified pieces of text. Documents are described with Metadata and they are structured in Lynx Document Parts.
- Collections are groups of Lynx Documents with any logical relation. There may be one collection per use case, per jurisdiction, etc. Collections are not specified in this document.
- Annotations are enrichments of Lynx Documents provided by the Lynx annotation services and represented with NIF.

2.3.2 Data portal

The Lynx data portal is mainly composed of Legal Corpora and Legal Language Resources. It relies on CKAN to make public the collected and documented relevant data for the Lynx project. CKAN is a tool for making open data websites that helps to manage and publish collection of data. Once published, users can use its faceted search features to browse and find the needed data and preview it using maps, graph and tables.

CKAN is built with Python on the backend and Javascript on the frontend and uses The Pylons web framework and SQLAlchemy as its ORM. Its database engine is PostgreSQL and its search is powered by SOLR. It also offers a powerful API that allows third-party applications and services to be built around it.

The Lynx Data Portal contains 172 datasets provided by Universidad Politécnica de Madrid (UPM) and TILDE. Figure 2 shows a screenshot of the data portal on the Lynx website.



The screenshot shows the Lynx Data Portal interface. At the top, there is a navigation bar with the Lynx logo, a search bar, and links for Datasets, Organizations, Groups, and About. A 'Log in' button is in the top right corner. Below the navigation bar, the page title is 'Home / Datasets'. On the left side, there is a sidebar with filters for Organizations (OEG (107), TILDE (65)), Groups (no results), Tags (no results), Formats (TBX,CSV,RDF (53), RDF (42), PDF (40), HTML (12), Unknown (5), XML (5), RTF (2), SKOS (2), TBX (2), XLSX (2), and Licenses. The main content area features a search bar with the text 'Search datasets...'. Below the search bar, it displays '172 datasets found' and an 'Order by: Relevance' dropdown menu. The search results are listed as follows:

- Legal Spanish Encyclopaedia**: Spanish Encyclopaedia from the legal domain.
- World Legal Information Institute**: 1834 databases from 123 jurisdictions via 14 Legal Information Institutes.
- The Supreme Court - United Kingdom**: Civil and criminal cases. **PDF**
- Legislation from the UK**: Legislation.gov.uk carries most (but not all) types of legislation and their accompanying explanatory documents. **PDF**
- Ministry of Justice Slovak Republic**: International, criminal and civil law from Slovakia. **PDF**
- Lagrummet - Sweden**: Lagrummet.se is a portal for Swedish public administration legal information. **PDF**

Figure 2 Lynx Data Portal

LKG Specification



Legal Knowledge Graph Ontology

This version: <http://kg.lynx-project.eu/def/>
Revision: 2
Authors: Victor Rodriguez-Donceil, Soňa Karanpáková, Filippo Maganza, Susanna Bernasconi, Julian Moreno-Schneider
Download serialization: [Context TTL](#)
JSON-LD context file for Lynx Documents: [Context JSON-LD](#)
License: [Creative Commons CC BY](#)

Abstract

This is an ontology of documents related to compliance. This specification serves as a data model for documents in the [H2020 Lynx](#) project.

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1. Introduction
2. Description through examples
 - 2.1 Preliminary examples
 - 2.2 Simple examples
3. Validation
4. Ontology description
5. Benchmarking
6. References and acknowledgements
- Annex I. Types of documents

1. Introduction

This ontology has been made with the purpose of supporting the representation of Lynx Documents, e.g., any document related to compliance worth to be in a Legal Knowledge Graph. This specification serves as a data model for documents in the Lynx project.

Lynx Documents are compliant with [NIF](#) (NLP Interchange Format) specification and heavily reuses [ELI](#) metadata elements. Other ontologies have been also considered as a reference: see a broad list [here](#).

If you are going to program in Java to manipulate the data structures described in this document, we recommend you using the library described [here](#).

The [H2020 Lynx](#) project is about providing better services on compliance. The added value of the Lynx services revolve around a better processing of heterogeneous, multilingual documents in the legal domain. Hence, the most important document is the [Lynx Document](#). Lynx Documents may be grouped in Collections, and may be enriched with Annotations. Thus, the main entities to deal with are three:

- [Lynx Documents](#) are the basic information units in Lynx: identified pieces of text. Documents are described with [Metadata](#) and they structured in [Lynx Document Parts](#).
- Collections are groups of Lynx Documents with any logical relation. There may be one collection per use case, per jurisdiction, etc. Collections are not specified in this document.
- Annotations are enrichments of Lynx Documents, such as summaries, translation, recognized entities, etc.

2. Description through example

This section describes how to represent LKG documents supported by the ontology through examples. LKG documents can be validated against certain rules.

2.1 Preliminary examples

You may skip this section if you are familiar with NIF, JSON-LD and RDF. This subsection does not contain valid [LynxDocument](#) examples and its purpose is to serve as an introduction to those unfamiliar with NIF, JSON-LD and RDF.

Towards a Lynx Document

The listing below show a JSON-LD document, with text property. This is **not** a valid [LynxDocument](#) because it lacks certain metadata elements and because it lacks offset information for the text.

```

{
  "@context": "http://lynx-project.eu/doc/jsonld/lynxdocument.json",
  "@id": "http://lynx-project.eu/doc/0",
  "@type": "http://kg.lynx-project.eu/def/LynxDocument",
  "text": "This is the first Lynx document, a piece of identified text."
}
    
```

You may want to look at these lines in detail:

- The first line declares the context (`@context`), which describes how to interpret the rest of the JSON-LD document, mapping JSON properties into URI. It references an external (and very important) file, the [context file](#). This file makes possible the neat transformation from beautiful JSON-LD to other RDF serializations.
- The second line (`@id`) declares the identifier of the document, which must be the full URI –every [LynxDocument](#) is identified by a URI.
- The `@type` line declares what is the type (rdf type) of the document. The document must be an instance of `kg:lynxdocument`.
- The text element represents the text of the document. Although this is a text property in JSON, this is mapped to `nif:string` as URI. The earliest versions of Lynx code used `of:value` instead.

The JSON-LD version can be automatically converted into other RDF syntaxes. For example, the Turtle version of the same document follows. In any case, they must be syntactically valid RDF. This is validated by validation rule [R001](#). In fact, every instance of `nif:string` should have a valid URI. This is validated by validation rule [R010](#).

```

@prefix kg: <http://kg.lynx-project.eu/def/>
@prefix nif: <http://persistence.uni-leipzig.org/nlp2rdf/ontologies/nif-core#>
@prefix lynx: <http://lynx-project.eu/doc/samples/doc000>
a kg:lynxdocument
nif:string "This is the first Lynx document, a piece of identified text."
    
```

Lynx Document as a NIF document

Lynx Documents are NIF documents because the `kg:lynxdocument` is a subclass of `nif:Context`: they can serve as the context for NIF annotations. The NIF ontology is available [online](#). Of course, explicitly declaring that the [LynxDocument](#) is also a `nif:Context` is possible. Please note that NIF requires `beginIndex` and `endIndex` to exist. This second example is a NIF document, but not yet a [LynxDocument](#) because some metadata properties are missing.

```

{
  "@context": "http://lynx-project.eu/doc/jsonld/lynxdocument.json",
  "@id": "http://lynx-project.eu/doc/samples/doc000",
  "@type": "http://kg.lynx-project.eu/def/LynxDocument",
  "text": "This Lynx document is a valid NIF document.",
  "offset-start": "0",
  "offset-end": "0"
}
    
```

```

@prefix kg: <http://kg.lynx-project.eu/def/>
@prefix nif: <http://persistence.uni-leipzig.org/nlp2rdf/ontologies/nif-core#>
@prefix lynx: <http://lynx-project.eu/doc/samples/doc000>
a kg:lynxdocument
nif:string "This Lynx document is a valid NIF document" ;
nif:beginIndex "0"^^xsd:nonNegativeInteger ;
nif:endIndex "41"^^xsd:nonNegativeInteger .
    
```

Instances `nif:Context` are required to have attributed exactly one `nif:string`. This is validated by rule [R003](#). The literal with the string must not have a language tag. This is validated by rule [R013](#).

Lynx Documents with metadata

Metadata is a collection of pairs property-list of values (such as "subject-testing/documents") and pairs of property-value (such as "title-SecondDocument"). They are introduced with the string metadata in JSON (which turns to be `kg:metadata` in RDF). This is better illustrated with the example below. The recommended metadata elements are listed in a [Table](#), useful for both coders in JSON-LD and RDF Turtle. The following excerpt shows a [LynxDocument](#) with two metadata records that are mandatory: `language` (`dc:language` in RDF) and `id.local` (`eli:id.local` in RDF). This is validated with rules [R005](#), [R006](#), [R009](#). [LynxDocuments](#) must have a property with the id local, `eli:id.local`. This is validated with validation rule [R009](#).

```

{
  "@context": "http://lynx-project.eu/doc/jsonld/lynxdocument.json",
  "@id": "http://lynx-project.eu/doc/samples/doc000",
  "@type": "http://kg.lynx-project.eu/def/LynxDocument",
  "text": "Das ist ein Dokument..",
  "offset-start": "0",
  "offset-end": "20",
  "metadata": [
    {
      "language": "de",
      "id.local": "doc000"
    }
  ]
}
    
```

```

@prefix nif: <http://persistence.uni-leipzig.org/nlp2rdf/ontologies/nif-core#>
@prefix kg: <http://kg.lynx-project.eu/def/>
@prefix eli: <http://persistence.uni-leipzig.org/nlp2rdf/ontologies/eli#>
@prefix lynx: <http://lynx-project.eu/doc/samples/doc000>
a kg:lynxdocument
nif:string "Das ist ein Dokument." ;
kg:metadata [
  kg:language "de" ;
  eli:id.local "doc000" ;
  nif:beginIndex "0"^^xsd:nonNegativeInteger ;
  nif:endIndex "20"^^xsd:nonNegativeInteger ;
nif:string "Das ist ein Dokument."
    
```

URI policy for Lynx Documents

There is no restriction on how [LynxDocuments](#) are identified –except that the identifiers must be URIs. A possible pattern is: `http://USE-CASE-PART/res/slug`, where `slug` is the local identifier of the document. If the local identifier contains strange characters, the slug will be its URI Encoded version.

Legislative documents must have jurisdiction.

When the type of document is legislation, two additional elements are mandatory: `jurisdiction` (`eli:jurisdiction` in RDF) and `first date entry in force` (also written with namespace). This is validated by rule [R005](#). The value for the `jurisdiction` property is recommended to be a ISO 3166-1 or ISO 3166-2 alpha 2 (codes with two letters), in capitalized form. EU represents European Union. ATU lists not supported as of this version.

Lynx Document with language information

Every [LynxDocument](#) must have one and only one main language declared in the metadata section. This is represented with `language` in JSON, and `dc:language` in the rest of RDF serializations. In addition to this, some strings (e.g. keywords) can be in other languages, which can be specified in using `rdf:language` tags. The text itself must not have a language tag.

The language codes are those specified by [ISO 639-1](#) codes. The use of language variants is not recommended (e.g. `es-es` for the Spanish spoken in Mexico) because services will not recognize it as Spanish (e.g. `Timex` will refuse the annotation of such unknown language).

The example below shows the specification of language using the `language` element and the RDF `language` tags of literals. The following metadata elements are expected to have a language tag: `title`, `subject`.

Figure 3 Lynx Data model

2.3.3 Multilingual legal knowledge graph

Then, a small Lynx pilot to demonstrate how access to legislation as data within the Multilingual Legal Knowledge Graph has been implemented. Figure 4 depicts a screenshot of the Multilingual Legal Knowledge Graph at the time of writing this report. This small pilot enables the search of different type of normative documents (legislation, case law, standards and collective agreements). Besides, the search criteria also include jurisdiction (European Union, Spain, Austria, Netherlands, Germany, Ireland, Australia, Greece and Mexico) and language (English, Spanish, German, Dutch, Catalan and Greek).

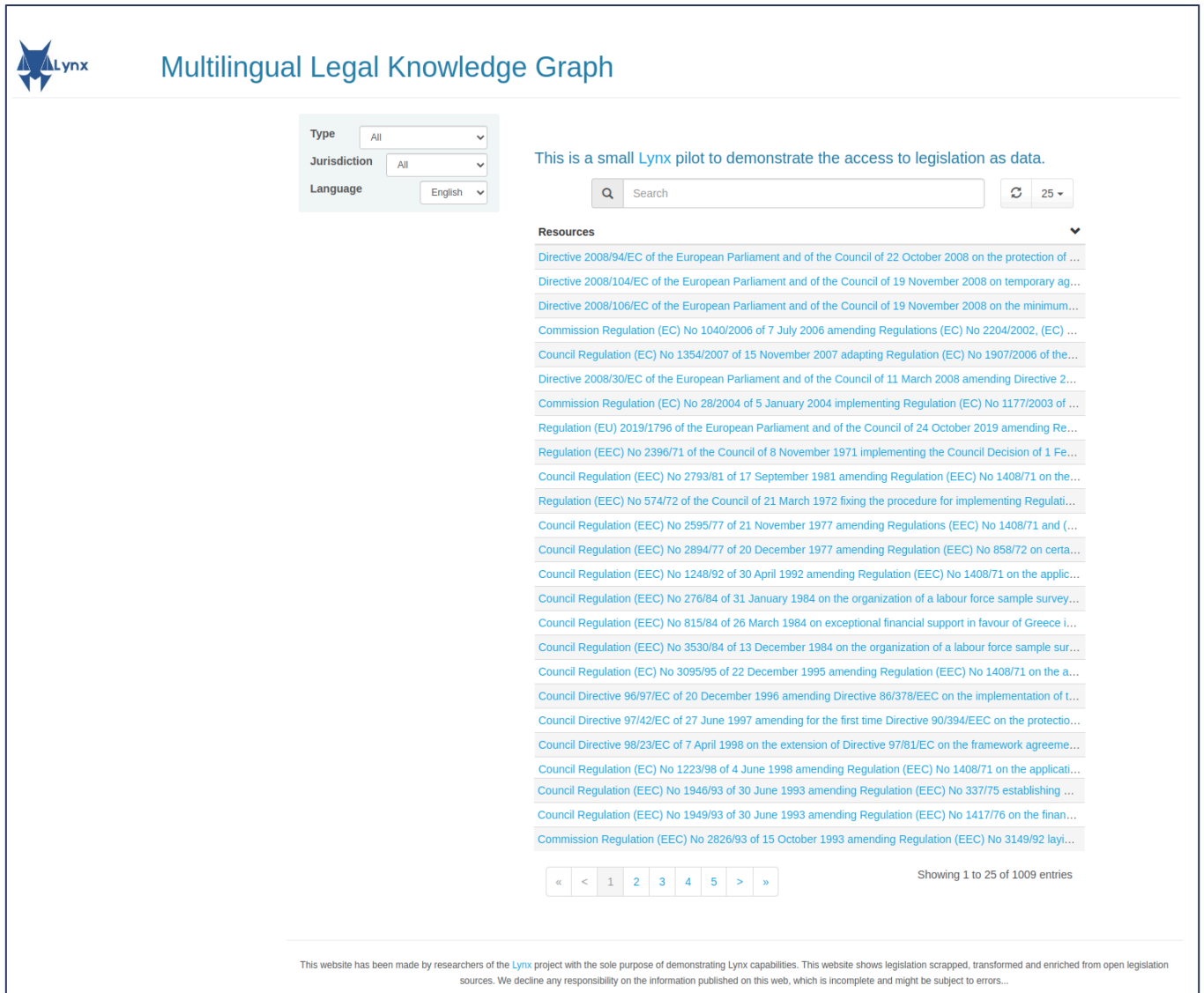


Figure 4 Lynx Multilingual Legal Knowledge Graph

2.3.4 Services

The services that the Lynx project made available to the general public and stakeholders consists of two main categories: services through web portals; and services through APIs. In this section of the website descriptions, links to tutorials, examples, demonstrators, among others, are provided. This website section is organized as follows:

- Web portals
 - LKG Portal
 - Data portal
- APIs
 - Platform services
 - Workflow manager
 - Document manager
 - Authentication and Identity Management
 - Annotation services
 - Temporal expression
 - Geographical NER
 - Named Entity Recognition
 - Relation Extraction
 - Entity Linking
 - Search and Information Retrieval Services
 - Question Answering
 - Crosslingual Search
 - Semantic Similarity
 - Terminology Query
 - Vocabulary-related Services
 - Dictionary Services
 - Terminology Extraction
 - Conversion Services
 - Machine translation
 - Summarization

Figure 5 depicts a screenshot of the services section within the Lynx website. All services are represented in an independent box that lies under a main category.

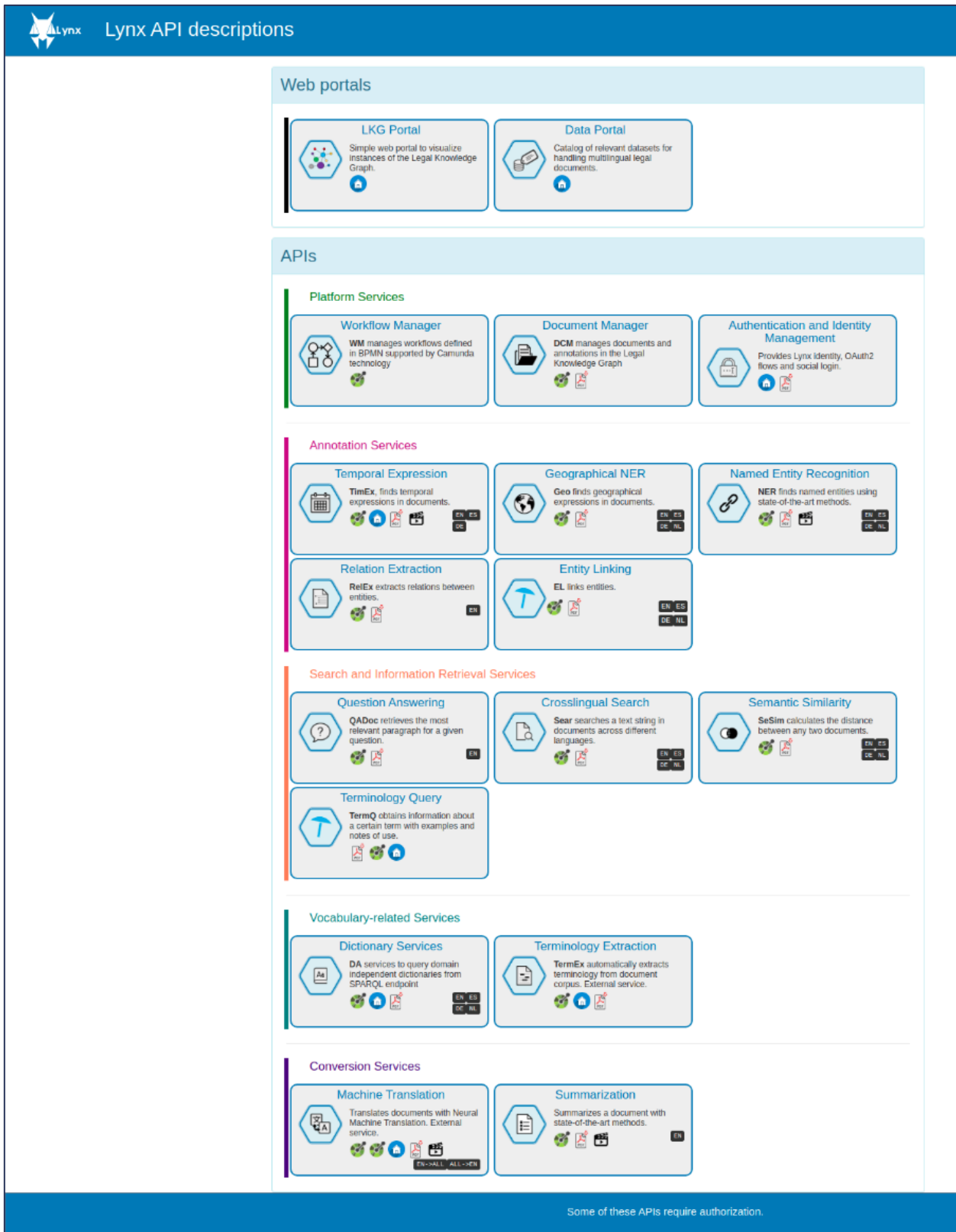


Figure 5 Lynx services: Web portals and APIs

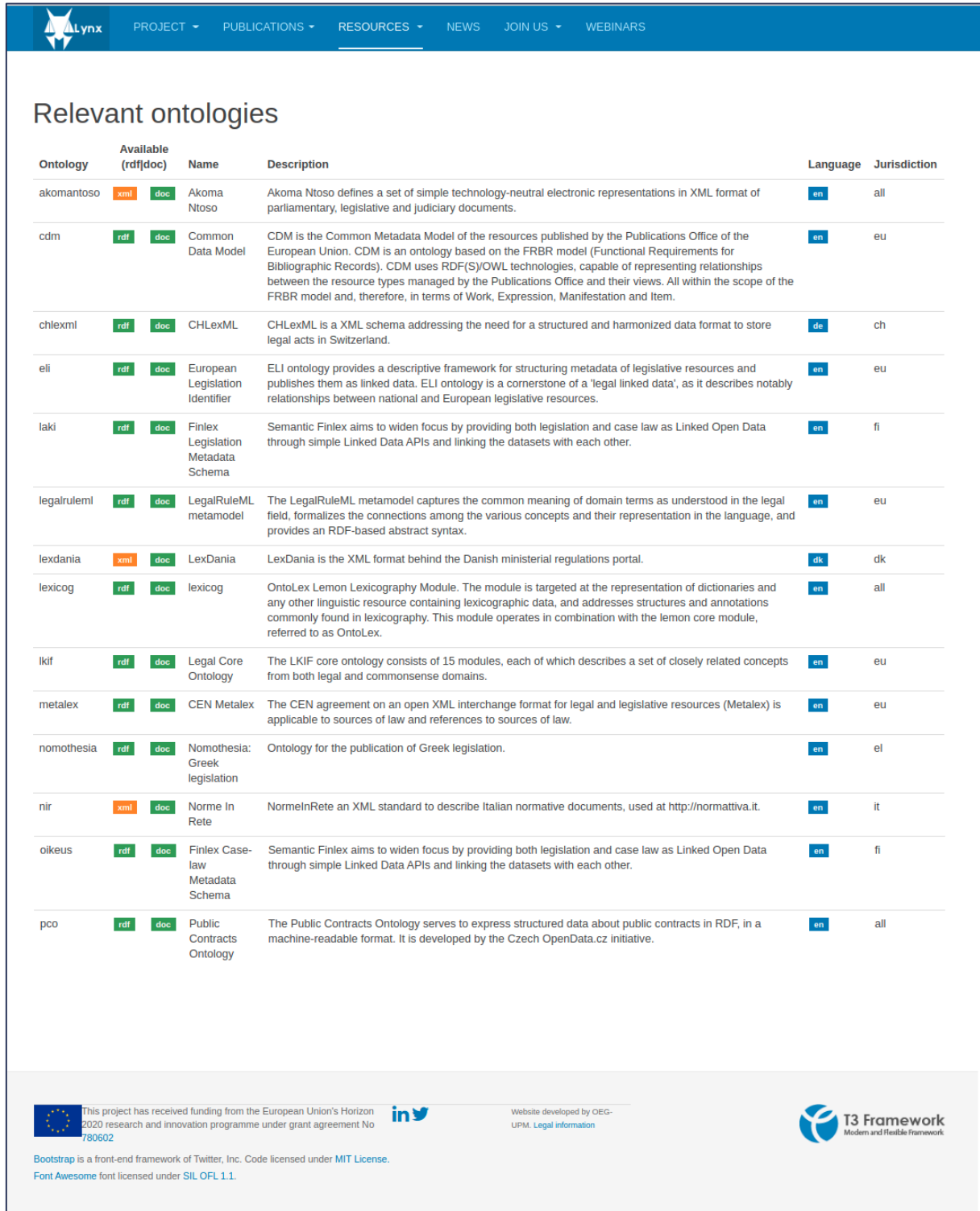
2.3.5 Relevant ontologies

Relevant ontologies for the project are listed in the Lynx website. Most of these ontologies were a main input to the Lynx Document and data model implementation (see Section 2.3.1). In this list, the information collected is:

- Ontology

- Type of document
- Name
- Description
- Language
- Jurisdiction

Figure 6 depicts a screenshot of this section within the Lynx project website.

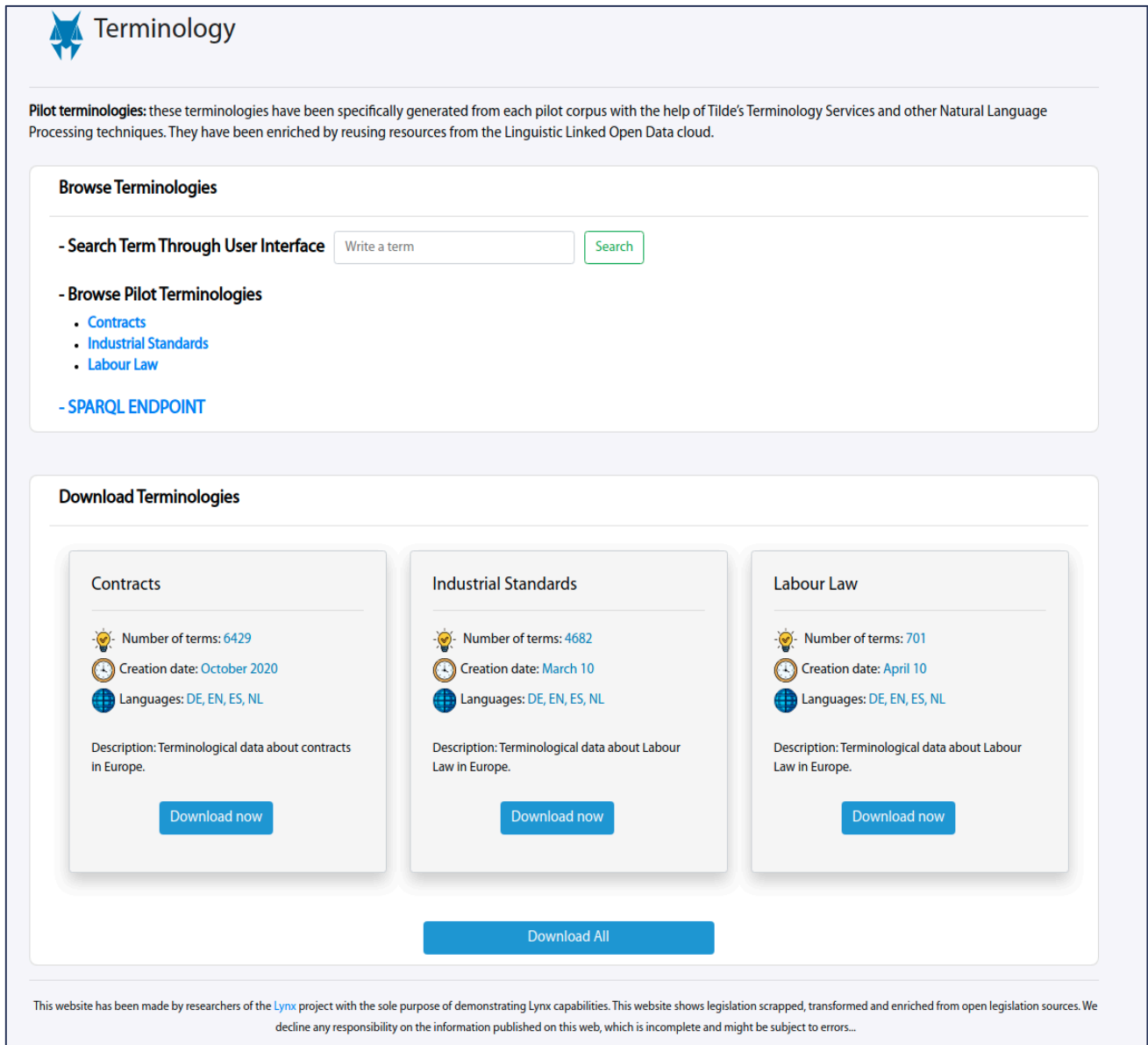


| Ontology | Available (rdf doc) | Name | Description | Language | Jurisdiction |
|-------------|---|------------------------------------|---|--------------------|--------------|
| akomantoso | xml doc | Akoma Ntoso | Akoma Ntoso defines a set of simple technology-neutral electronic representations in XML format of parliamentary, legislative and judiciary documents. | en | all |
| cdm | rdf doc | Common Data Model | CDM is the Common Metadata Model of the resources published by the Publications Office of the European Union. CDM is an ontology based on the FRBR model (Functional Requirements for Bibliographic Records). CDM uses RDF(S)/OWL technologies, capable of representing relationships between the resource types managed by the Publications Office and their views. All within the scope of the FRBR model and, therefore, in terms of Work, Expression, Manifestation and Item. | en | eu |
| chlexml | rdf doc | CHLexML | CHLexML is a XML schema addressing the need for a structured and harmonized data format to store legal acts in Switzerland. | de | ch |
| eli | rdf doc | European Legislation Identifier | ELI ontology provides a descriptive framework for structuring metadata of legislative resources and publishes them as linked data. ELI ontology is a cornerstone of a 'legal linked data', as it describes notably relationships between national and European legislative resources. | en | eu |
| laki | rdf doc | Finlex Legislation Metadata Schema | Semantic Finlex aims to widen focus by providing both legislation and case law as Linked Open Data through simple Linked Data APIs and linking the datasets with each other. | en | fi |
| legalruleml | rdf doc | LegalRuleML metamodel | The LegalRuleML metamodel captures the common meaning of domain terms as understood in the legal field, formalizes the connections among the various concepts and their representation in the language, and provides an RDF-based abstract syntax. | en | eu |
| lexdania | xml doc | LexDania | LexDania is the XML format behind the Danish ministerial regulations portal. | dk | dk |
| lexicog | rdf doc | lexicog | OntoLex Lemon Lexicography Module. The module is targeted at the representation of dictionaries and any other linguistic resource containing lexicographic data, and addresses structures and annotations commonly found in lexicography. This module operates in combination with the lemon core module, referred to as OntoLex. | en | all |
| lkif | rdf doc | Legal Core Ontology | The LKIF core ontology consists of 15 modules, each of which describes a set of closely related concepts from both legal and commonsense domains. | en | eu |
| metalex | rdf doc | CEN Metalex | The CEN agreement on an open XML interchange format for legal and legislative resources (Metalex) is applicable to sources of law and references to sources of law. | en | eu |
| nomothesia | rdf doc | Nomothesia: Greek legislation | Ontology for the publication of Greek legislation. | en | el |
| nir | xml doc | Norme In Rete | NormeInRete an XML standard to describe Italian normative documents, used at http://normattiva.it . | en | it |
| oikeus | rdf doc | Finlex Case-law Metadata Schema | Semantic Finlex aims to widen focus by providing both legislation and case law as Linked Open Data through simple Linked Data APIs and linking the datasets with each other. | en | fi |
| pco | rdf doc | Public Contracts Ontology | The Public Contracts Ontology serves to express structured data about public contracts in RDF, in a machine-readable format. It is developed by the Czech OpenData.cz initiative. | en | all |

Figure 6 Relevant ontologies for the Lynx project

2.3.6 Terminologies

The terminologies available on the “Resources” section have been specifically generated from each pilot corpus with the help of Tilde’s Terminology Services and other Natural Language Processing techniques. Moreover, these terminologies have been enriched by reusing resources from the Linguistic Linked Open Data cloud. Figure 7 shows a screenshot of the terminologies used in the project, although not all of them are publicly available.



Terminology

Pilot terminologies: these terminologies have been specifically generated from each pilot corpus with the help of Tilde’s Terminology Services and other Natural Language Processing techniques. They have been enriched by reusing resources from the Linguistic Linked Open Data cloud.

Browse Terminologies

- Search Term Through User Interface

- Browse Pilot Terminologies

- [Contracts](#)
- [Industrial Standards](#)
- [Labour Law](#)

- SPARQL ENDPOINT

Download Terminologies

| Contracts | Industrial Standards | Labour Law |
|---|---|--|
| <ul style="list-style-type: none"> Number of terms: 6429 Creation date: October 2020 Languages: DE, EN, ES, NL | <ul style="list-style-type: none"> Number of terms: 4682 Creation date: March 10 Languages: DE, EN, ES, NL | <ul style="list-style-type: none"> Number of terms: 701 Creation date: April 10 Languages: DE, EN, ES, NL |
| Description: Terminological data about contracts in Europe. | Description: Terminological data about Labour Law in Europe. | Description: Terminological data about Labour Law in Europe. |
| <input type="button" value="Download now"/> | <input type="button" value="Download now"/> | <input type="button" value="Download now"/> |

This website has been made by researchers of the Lynx project with the sole purpose of demonstrating Lynx capabilities. This website shows legislation scrapped, transformed and enriched from open legislation sources. We decline any responsibility on the information published on this web, which is incomplete and might be subject to errors...

Figure 7 Terminologies developed for the Lynx pilots

2.3.7 SPARQL

A Virtuoso SPARQL Endpoint is a feature of every Virtuoso Relational Database Management System instance that offers an HTTP-based Query Service that operates on Entity Relationship Types (Relations) represented as RDF sentence collections using the SPARQL Query Language²³. These operations may be read- and/or write-oriented and distributed without compromising security, performance, or scalability.

²³ SPARQL Query Language: <https://www.w3.org/TR/sparql11-query/>

The Lynx project website provides a section that contains a Virtuoso SPARQL Query editor, enabling the feature of run queries within the available datasets. Figure 8 shows a screenshot of this section within the Lynx project website.

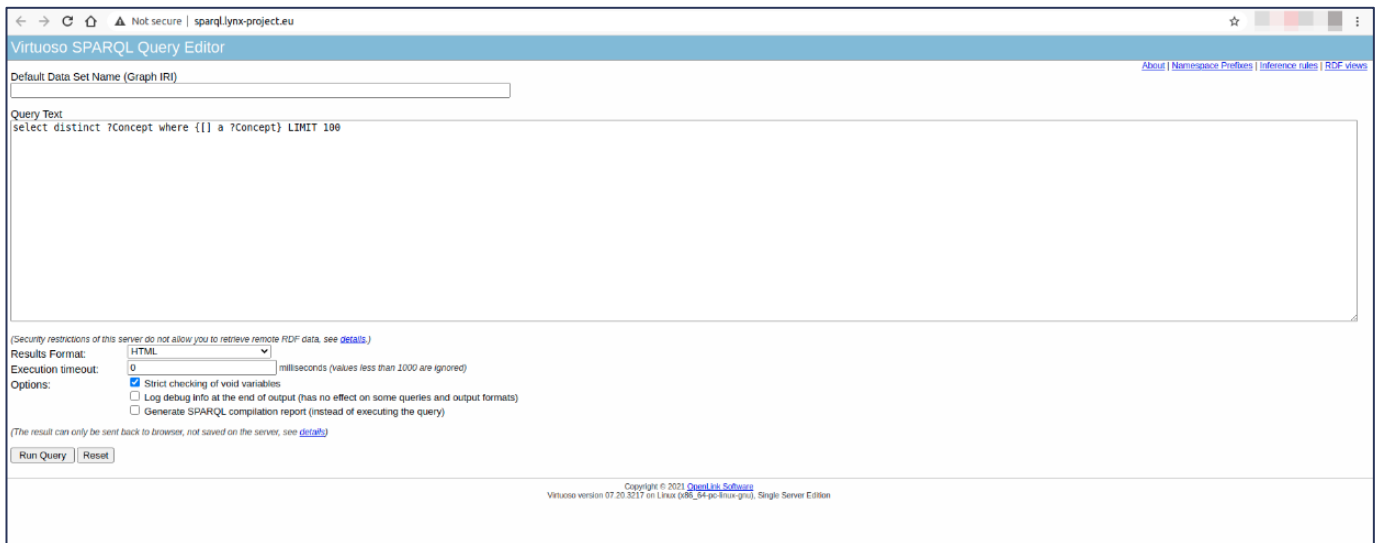


Figure 8 Virtuoso SPARQL Query editor for the Lynx project

2.3.8 Domain independent vocabularies

Domain-independent vocabularies in the project provide a common catalogue of word meanings which allow to traverse semantically annotated documents from different domains. They also serve as support for NLP tasks such as word sense disambiguation (WSD), question answering (QA), and cross-lingual search, and help to retrieve synonyms and translations, among other lexical data.

In Lynx, these vocabularies come in the form of multilingual lexicographic resources by the consortium partner K Dictionaries (KD), and they comprise, specifically, lexical data for Dutch, English, German and Spanish.

For these lexical resources to be easily integrated into the Legal Knowledge Graph (LKG), we rely on the semantic representation of the data as Linked Data (LD). To this end, the data needs to be first converted to the Resource Description Framework (RDF) format and semantically annotated using ontologies. This serves to ensure both syntactic as well as semantic interoperability of the resulting datasets, accessible at the end of this process via a REST API²⁴.

2.4 NEWS

This section contains the “News” site within the Lynx website. In this section, the Lynx Consortium publishes all relevant information regarding project events, achievements, and published data sets, among others. This section is intended to communicate relevant news from the project to stakeholders, end-users and general public. Figure 9 depicts a screenshot of this section.

²⁴ https://en.wikipedia.org/wiki/Representational_state_transfer

PROJECT PUBLICATIONS RESOURCES **NEWS** JOIN US WEBINARS

Created: 18 January 2021

Halfway through Lynx webinar series!



Happy 2021!

We start this (hopeful) year announcing that we are now halfway through the Lynx webinar series. Last week, we celebrated Webinar 2, which was focused on exposing the three business cases on top of Lynx Legal Knowledge Graph. All the webinars are being recorded and videos are available at the [Lynx Youtube Channel](#). The slides of each webinar are also available in [Slideshare](#).

We still have two webinars to go, plus the Lynx Final Event. We hope to see all of you there. [Register now at our webinars' webpage!](#)

Created: 23 December 2020

Lynx Webinar Series announced in BDVA newsletter



The Big Data Value Association (BDVA), a not-for-profit organisation conformed by industries all over Europe as well as research and user organizations, has presented Lynx Webinar Series in their newsletter. All details regarding the four webinars are available at: <https://www.big-data-value.eu/lynx-webinar-series>. Attendees can also be registered through that site.

Created: 02 December 2020

Lynx presented at META-FORUM 2020



The second annual ELG conference, [META-FORUM 2020](#), is currently being virtually celebrated. In this conference, the most recent developments in European Language Technology industry and research are being presented. The Lynx project is, as well, being presented as one of the most relevant innovation projects in the current scene. Access is open for every user interested.

Created: 09 December 2020



Lynx works presented in the JURIX conference workshops

This week, the JURIX is taking place online: 33rd International Conference on Legal Knowledge and Information Systems. December 9-11, 2020. The conference will be held online. Two relevant works are being presented: the joint work of UPM and Cuatrecasas on a dataset of questions and answers over the Spanish Statute of Workers and a work to identify definitions in Spanish laws. Participation is free! See the program online.

Created: 02 December 2020

Lynx Temporal Expression Recognition

The Lynx Temporal Expression Recognition [microservice](#) got a video! Watch it for more information on what a temporal expression is, what can we retrieve and how we do so. Different ways to use the service within the Lynx project are also shown. Watch it in [full screen!](#)



More Articles ...

- [Lynx Webinar Series](#)
- [7th Lynx Plenary \(Virtual\) Meeting](#)
- [Lynx services now also present on the European Language Grid](#)
- [Lynx presented at ESWC and ReMap 2020](#)

Start Prev **1** 2 3 4 5 6 7 8 9 10 Next End

Page 1 of 13

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780602

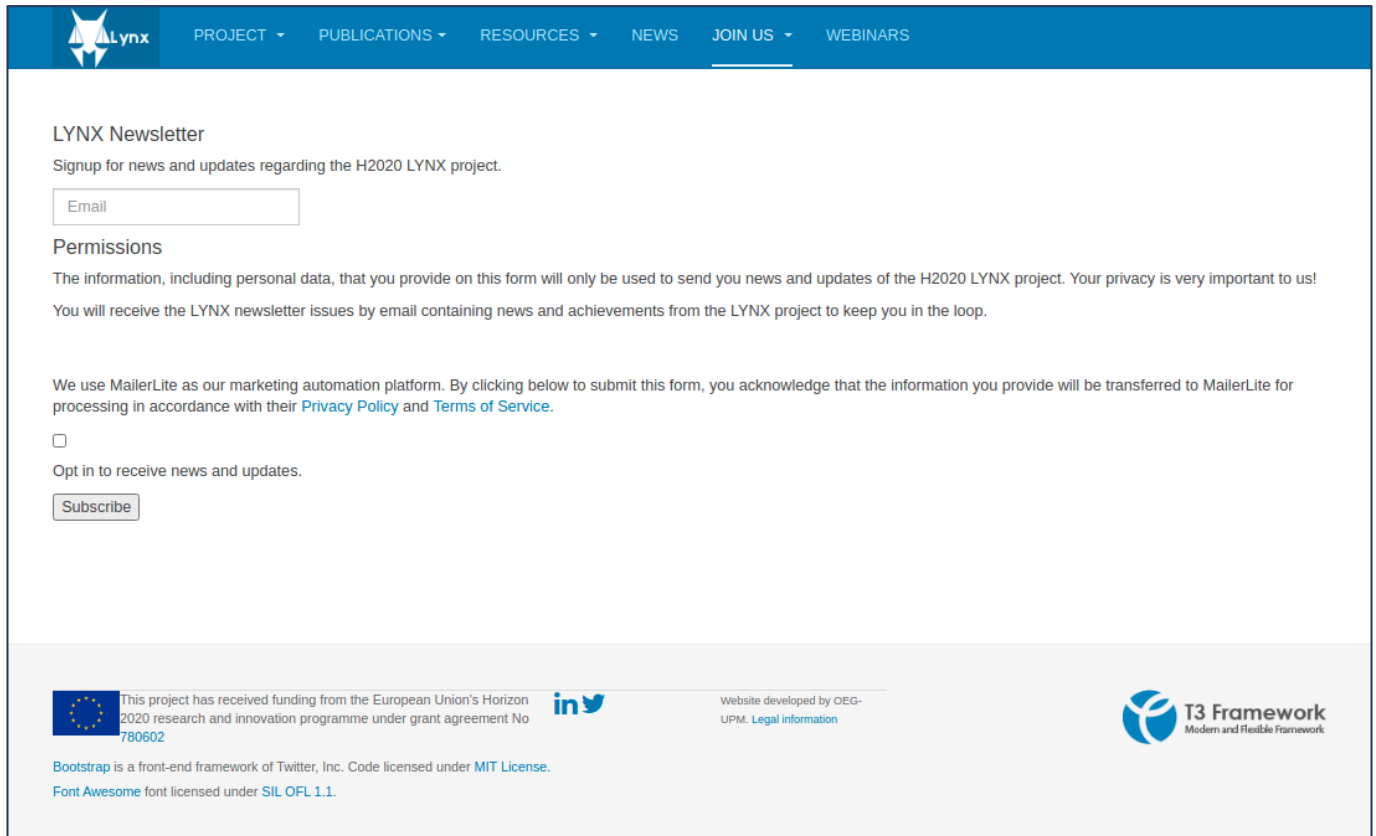
Website developed by OGS-UMH. Legal Information

RSS
 Bootstrap is a front-end framework of Twitter, Inc. Code licensed under MIT License.
 Font Awesome font licensed under SIL OFL 1.1.

Figure 9 News section in the Lynx website

2.5 JOIN US

A newsletter is a report containing news of the activities of a business or organization that is sent by e-mail regularly to interested parties (Industry Board, amongst others). The Lynx project has released 3 different newsletter issues that summarised all the activities carried out during the project lifespan. Figure 10 shows the sign-up form that the Lynx website makes available to the public at large and stakeholders. This form allows to subscribe to the Lynx newsletter. A more in-depth discussion about the content of the Lynx newsletter issues is provided by Section 4 in this document.



The screenshot shows the Lynx website's newsletter sign-up form. At the top, there is a navigation bar with the Lynx logo and menu items: PROJECT, PUBLICATIONS, RESOURCES, NEWS, JOIN US (highlighted), and WEBINARS. The main content area is titled "LYNX Newsletter" and includes the following text: "Signup for news and updates regarding the H2020 LYNX project." Below this is an "Email" input field. A "Permissions" section follows, stating: "The information, including personal data, that you provide on this form will only be used to send you news and updates of the H2020 LYNX project. Your privacy is very important to us! You will receive the LYNX newsletter issues by email containing news and achievements from the LYNX project to keep you in the loop." Below this is a paragraph: "We use MailerLite as our marketing automation platform. By clicking below to submit this form, you acknowledge that the information you provide will be transferred to MailerLite for processing in accordance with their [Privacy Policy](#) and [Terms of Service](#)." There is an unchecked checkbox with the text "Opt in to receive news and updates." Below the checkbox is a "Subscribe" button. At the bottom of the form, there is a footer section with the following content: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 780602" (with the European Union flag logo), "in" (with LinkedIn and Twitter logos), "Website developed by OEG-UPM. [Legal information](#)", and "T3 Framework Modern and Flexible Framework" (with the T3 Framework logo). Below the footer, there are two lines of text: "Bootstrap is a front-end framework of Twitter, Inc. Code licensed under MIT License." and "Font Awesome font licensed under SIL OFL 1.1."

Figure 10 Newsletter subscribe form within Lynx website

2.6 WEBINARS

The COVID-19 pandemic has reshaped all face-to-face meetings in Europe for the past and current year. For this reason, the Lynx partners designed and implemented a set of 4 webinars that included: overview of the project; business cases; architecture and features of the Lynx services and platform. These webinars went from a top level for a non-technical audience to a more specialized audience, showing the insights of the Lynx architecture. Moreover, the webinars were recorded and uploaded to the Lynx YouTube channel to make them publicly available to stakeholders, SMEs, LEs and the public audience.

This section shows the section devoted to the webinar within the Lynx website. A more in-depth discussion about the webinars and their contents is provided in Section 3.4 (Lynx YouTube channel) and Section 6 (Webinars). Figure 11 depicts a screenshot of the webinars section within the Lynx website. It contains embedded links to the webinars YouTube recordings, information regarding the topic and speakers for each webinar, and the link to the used slides that are uploaded to the Lynx SlideShare channel (see Section 3.3 for the insights of the Lynx SlideShare channel)

PROJECT
PUBLICATIONS
RESOURCES
NEWS
JOIN US
WEBINARS

Lynx Webinar Series

To bring the project itself as well as the results to our specified target audiences, the Lynx consortium has set-up a Lynx Webinar Series for 2020 / 2021.

Webinar 1: Lynx overall webinar

Free Webinar on LegalTech & Compliance Services

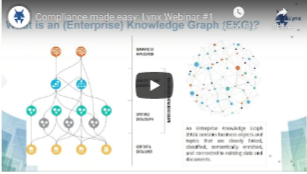
The main objective of the Lynx research and innovation project is to create an ecosystem of smart cloud services to better manage compliance, based on a Legal Knowledge Graph (LKG) that integrates and links multilingual and heterogeneous compliance data sources including legislation, case law, standards, regulations and other private contracts, besides others.

This webinar is the kick off of a webinar series of in total 4 webinars taking place between December 2020 and March 2021 (Webinar 1: Lynx overview, Webinar 2: Business Cases, Webinar 3: Technology of Lynx, Webinar 4: The Lynx Services) as well as a virtual event taking place on 17th of March 2021, 09:30 - 12:00pm CET including panel discussions and expert sessions on Lynx related topics (knowledge graphs, legaltech, compliance solutions, etc)

Date: 18/12/2020

This webinar provides an overview of and insights in:

- The Lynx project, Elena Montiel Ponsoda, Lynx project lead, Universidad Politécnica de Madrid
- Legal Knowledge Graph: What is this & what is it good for, Martin Kallenböck, Lynx Innovation Manager, Co-Founder and CFO of Semantic Web Company, SWC
- The Lynx Legal Knowledge Graph Model, Victor Rodriguez Dorca, Lynx Scientific Manager, Universidad Politécnica de Madrid
- Lynx Services Platform (LySP), Architecture & Services, Artem Revenko, Director of Research & Innovation, SWC
- The 3 Pilots of Lynx: labor law, contract management, geothermal energy compliance, Christian Sageler, Managing Director, Cytidy GmbH



[Go to Webinar 1 slides here!](#)

Webinar 2: 3 Business Cases on top of the Lynx Legal Knowledge Graph

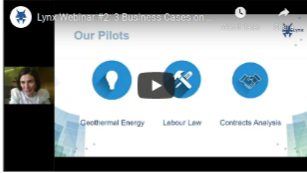
Free Webinar on smart compliance solutions: labour law, contract analysis and geothermal energy

This webinar will provide insights into (i) problem statement and requirements, (ii) business cases (iii) and technical solutions as well as (iv) showcase demos of the 3 compliance related Pilots of the Lynx project that are based and implemented on the Lynx Services Platform (LySP). These are (a) question-answering solution in the field of labour law by the Spanish law firm Cuatrecasas, (b) contract analysis and management by the Austrian legaltech startup Cytidy, and finally (c) the geothermal energy compliance recommender by the Norwegian consulting company DNV.GL.

Date: 14/01/2021

This webinar provides an overview of and insights in:

- Introduction & Moderation: Martin Kallenböck (Co-Founder and CFO of Semantic Web Company, SWC)
- Labor law Pilot, Cuatrecasas, Pascual Bot (Consultancy and Applications Director at CIJATRECASAS)
- Contract Analysis Pilot, Cytidy, Christian Sageler (Managing Director at Cytidy GmbH)
- Geothermal Energy Compliance, DNV.GL, Peter Verhoeven (Senior Consultant / Digital Innovation Manager at DNV GL)



[Go to Webinar 2 slides here!](#)

Webinar 3: Lynx Services Platform (LySP) - Part 1: Overview


Free Webinar on the Lynx Services Platform LySP: Architecture and basic Services

This webinar - with a focus on a technical audience - will provide insights into (i) the overall architecture of the Lynx Services Platform (LySP), (ii) and overview of LySP Services, and (iii) details and demos of the LySP basic services, like Document Manager, Workflow Manager, API Manager, and Authorization & Identity Management.

Date: 11/02/2021

This webinar provides an overview of and insights in:

- Introduction & Moderation: Martin Kallenböck (Co-Founder and CFO of Semantic Web Company, SWC)
- LySP Architecture, Filippo Maganza (Software Developer at Alpanite) and Sotiris Karapantelis (Senior Researcher at Semantic Web Company)
- LySP Basic Services, Filippo Maganza (Software Developer at Alpanite) and Victor Miries-Chavez (Senior Researcher at Semantic Web Company)



[Go to Webinar 3 slides here!](#)

Webinar 4: Lynx Services Platform (LySP) - Part 2: The Services


Free Webinar on the Lynx Services Platform LySP: Smart Services for Compliance

This webinar will provide insights into all smart services of the Lynx Services Platform (LySP) including demos of these LySP services, as for instance: Named Entity Extraction (NER) by DFN, Relation Extraction and Question-Answering by SWC, Machine Translation by Tilde or the Lexical cross-lingual lexical data service by KDictionaries.

Date: 18/02/2021

This webinar provides an overview of and insights in:

- Introduction & Moderation: Martin Kallenböck (Co-Founder and CFO of Semantic Web Company, SWC)
- LySP Services - Introduction and Overview, Artem Revenko (Director of Research & Innovation, Semantic Web Company)
- LySP Services, Ruben Martinez (Manager Customer Service, Tilde), Iain Kerrieman (CCO at Lexicalia by K Dictionaries), Christian Sageler (CCO of Cytidy), Victor Miries-Chavez (Senior Researcher, SWC), Julian Moreno (Researcher at DFN), Victor Rodriguez Dorca (Associate Lecturer, Artificial Intelligence Department, UPM)



[Go to Webinar 4 slides here!](#)

Check all Lynx videos in our Youtube Channel
 More on Lynx: <https://lynx-project.eu/>
 Twitter: @lynxproject
 LinkedIn: <https://www.linkedin.com/company/lynx-project-12020/>

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101019162

Bootstrap is a front-end framework of Twitter, Inc. Code licensed under MIT License.

Font Awesome font licensed under SIL, OFL 1.1.

Webinar developed by DFN - Lynx Legal Education

Figure 11 Webinars' section within the Lynx website

3 SOCIAL MEDIA

As stated in D6.1 [1], the social networks strategy for the Lynx project relies on four main pillars. The first is a Twitter account that is a social network focused on a general and diversified nature of topics. Thus, the Twitter account has been used to disseminate project achievements and events in order to reach all the identified key end-users and stakeholders as well as the general public. The second pillar is the LinkedIn account. This social media channel focuses on B2B, companies and enterprises. Thus, it is an important way of communication to be in touch and interplay with businesses stakeholders. The third pillar consists of the SlideShare account. This account is focused on the sharing of presentations and visual material. It is mainly addressed to an academic audience, allowing the definition of a considerable set of keywords and consistent descriptions of each audio-visual material, facilitating the search of specific content and, consequently, increasing the degree of expert acquaintance with the project. Finally, the fourth pillar consists of a YouTube channel to promote upcoming events, webinars, and achievements, among other contents.

3.1 TWITTER

Lynx has set up a Twitter account <https://twitter.com/lynxh2020?lang=en> with the username: @lynxh2020. Through this account, the project has been sharing results, meetings, conferences, public events and, to sum it up, all its relevant achievements and events. In addition, the Twitter account enables comments and feedback from researchers, stakeholders and potential consumers. Figure 13 shows a screenshot of the twitter account at the time of writing this deliverable.

Table 2 shows statistics regarding tweets, following, followers and tweets with multimedia content. Moreover, Figure 12 depicts a 28-day summary of the Lynx twitter account where “Impressions” means number of times users saw the tweet on Twitter.

| Tweets | Following | Followers | Media |
|--------|-----------|-----------|-------|
| 195 | 40 | 243 | 31 |

Table 2 Lynx twitter account statistics



Figure 12 Lynx twitter account 28 days summary with change over previous period

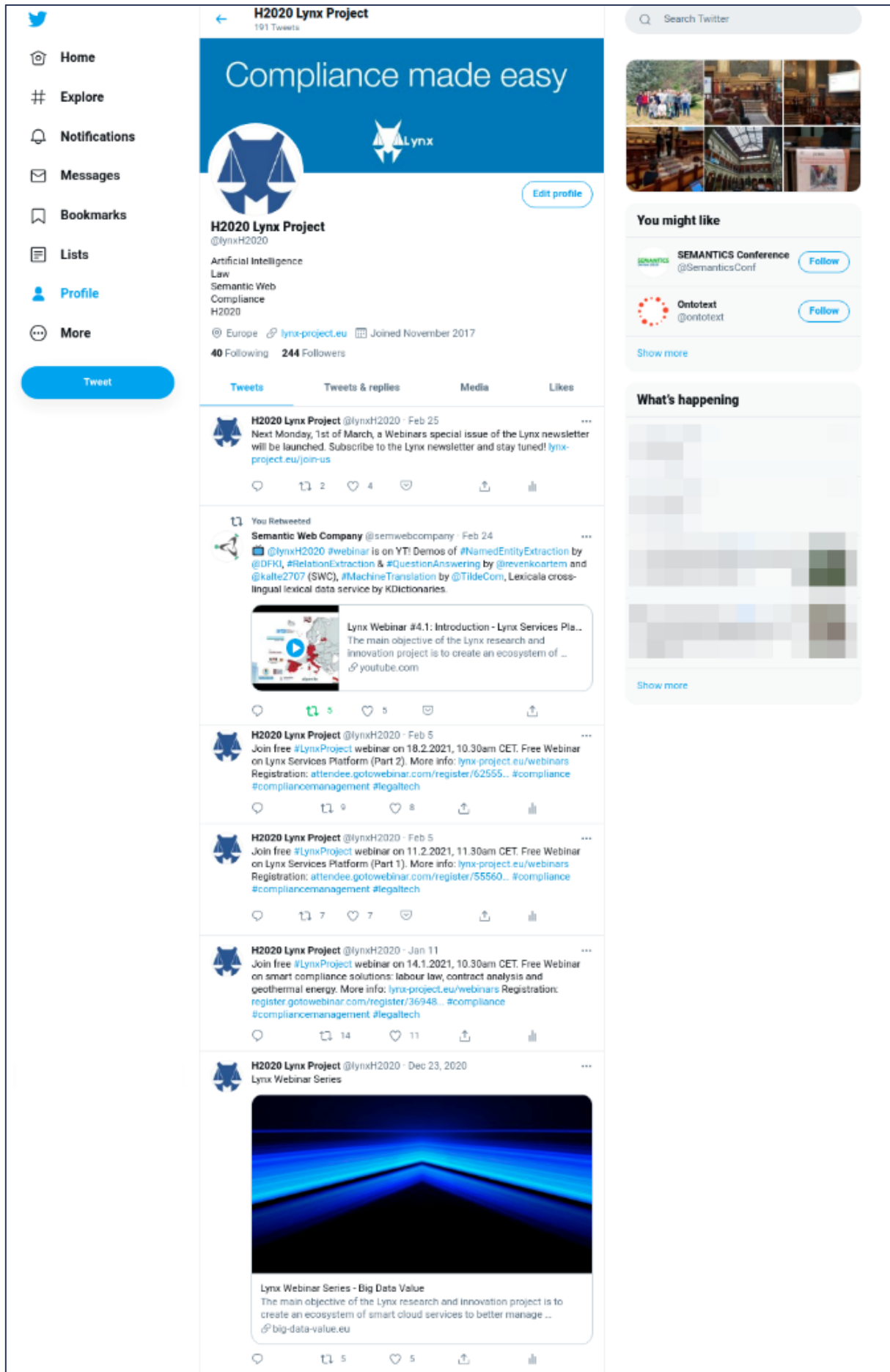


Figure 13 Lynx Twitter account

Figure 14 depicts the top tweets ordered by number of impressions. In this figure, “Impressions” means the number of times users saw the tweet on Twitter. “Engagements” is the total number of times a user has interacted with a tweet, this includes all clicks anywhere on the tweet (including hashtags, links, avatar, username and tweet expansion), retweets, replies, follows and likes. “Engagement rate” means the number of engagements (clicks, retweets, replies, follows and likes) divided by the total number of impressions.

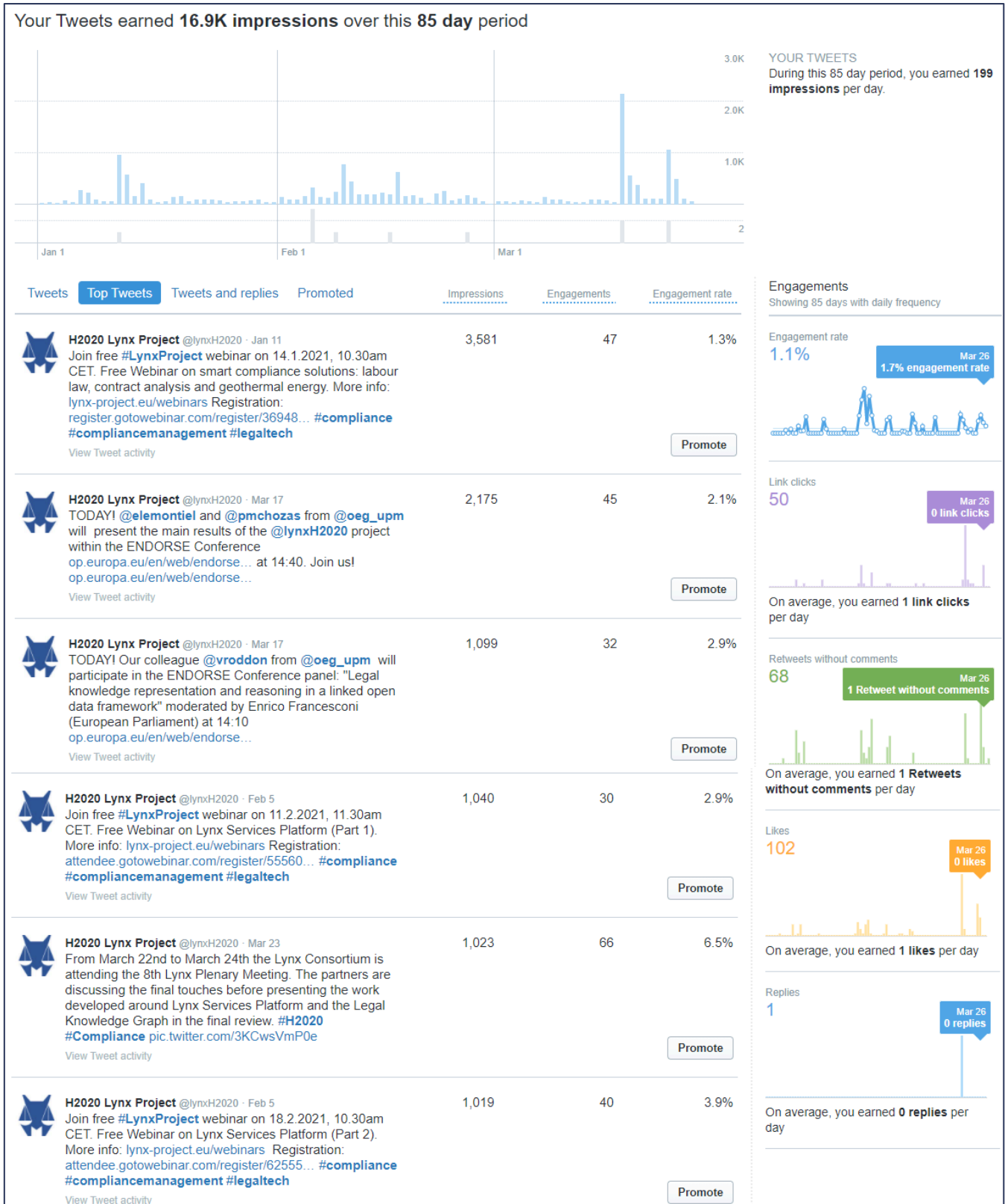


Figure 14 Lynx top tweets statistics

3.2 LINKEDIN

The Lynx project set up a LinkedIn profile page available at: <https://www.linkedin.com/in/lynx-project-h2020>. The profile contains basic information about the project, its main objectives and the Consortium, including links to the partners profile pages in LinkedIn. Here the Lynx project has been sharing results, meetings, conferences, public events and, in summary, all relevant achievements and events related to Lynx. The main goal is to increase acquaintance with the project by the professional community within this social network. Figure 16 shows the LinkedIn account landing page. At the time of writing this deliverable, the Lynx LinkedIn account has 95 connections and 18 profile viewers in the last 90 days.

3.3 SLIDESHARE

The Lynx project set up a SlideShare profile available at: <https://www.slideshare.net/LynxProject>. This channel has been used to share information about the project using presentations and documents. The main goal of this tool is to increase audience awareness levels and to spread out the project results and achievements through the Internet.

To sum up, the SlideShare channel contains 16 presentations and 4 documents. Table 3 lists the SlideShare channel statistics: presentations and documents name; and the number of views. Moreover, Figure 15 shows the SlideShare sections for presentations and documents.

| Presentations name | Number of views ²⁵ |
|---|-------------------------------|
| Lynx project overview | 315 |
| Lynx Webinar #1: Compliance made easy | 364 |
| Lynx Webinar #2: 3 Business cases on top of the Lynx Legal Knowledge Graph | 60 |
| Lynx Webinar #3: Lynx Services Platform (LynxSP) – Part 1– Overview | 33 |
| Lynx Webinar #4: Lynx Services Platform (LynxSP) – Part 2 – The Services | 42 |
| Lynx Pilot 1 @ ReMeP 2019 | 8 |
| Interoperability challenges in Lynx @ BDV-PPP Summit | 5 |
| Lynx @ TeReCom workshop co-located with JURIX 2017 | 6 |
| Lynx: Compliance made easy @ ManyLaws workshop co-located with JURIX 2019 | 6 |
| Lynx Industry Use Case. Pilot 3: Compliance Assurance for Geothermal Energy Projects | 6 |
| Lynx @ ELEXIS kick-off | 6 |
| Towards a Linked Open Data Cloud of Language Resources in the Legal Domain | 7 |
| Linked Data for multi-lingual and multi-jurisdictional Europe | 6 |
| Lynx presentation @ the 1 st Workshop on Language Resources and Technologies for the Legal Knowledge Graph | 6 |
| Lynx presentation @ the Legal Hackers' EMEA Summit | 6 |
| Lynx project presentation @ ENDORSE 2021 Conference | 6 |
| Documents | |
| Conference Poster. Artificial Intelligence Solutions for Legal Terminology Management. Patricia Martín-Chozas, Elena Montiel-Ponsoda. Artificial Intelligence Solutions for Legal Terminology Management, in XVI Encuentros Complutenses en torno a la Traducción Conference, Madrid 2018 | 7 |
| Lynx newsletter #1. Lynx overview: Compliance made easy | 21 |
| Lynx newsletter #2. Webinars, dissemination & communication channels | 12 |
| Lynx newsletter #3. Webinars special issue | 45 |
| Total | 967 |

²⁵ Last update: 30/03/2021

Table 3 Lynx SlideShare channel statistics overview

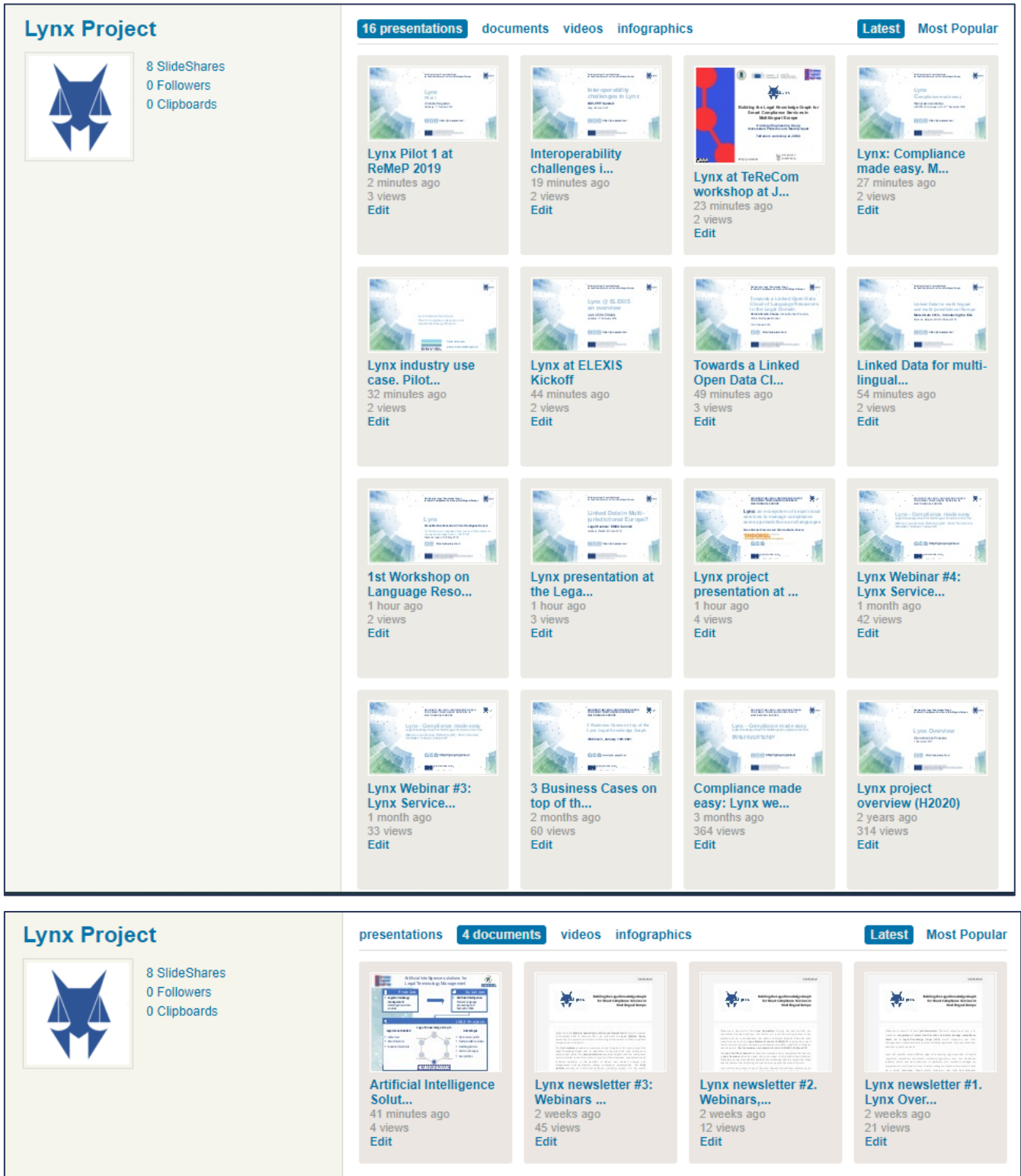



Figure 15 Lynx SlideShare account




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

Followers 99

Lynx's Activity

All activity
Articles
Posts
Documents



Lynx Project
Building the Legal Knowledge Graph for Smart Compliance Services in Multilin...
2w • 🔒

⋮


Join free [#LynxProject](#) webinar on Lynx Services Platform (LySP) Part 2: The Services. This webinar will provide insights into all smart services of the LySP including demos of these LySP services. 18/02/2021, 10.30am CET. Registration: [...see more](#)

Web Link
register.gotowebinar.com

👍 2

👍 Like
💬 Comment
➦ Share
✉️ Send

📊 59 views of your post in the feed



Lynx Project
Building the Legal Knowledge Graph for Smart Compliance Services in Multilin...
1mo • 🔒

⋮


Save the date: 11.2.2021!! Free [#LynxProject](#) webinar on Lynx Services platform (Part 1). Join it for [#free](#). More info: <https://lnkd.in/dFgiwpY> Registration: <https://lnkd.in/dkvMtgh> [#compliance](#) [#compliancemanagement](#) [#legaltech](#)

Web Link
register.gotowebinar.com

👍 Like

💬 Comment
➦ Share
✉️ Send

📊 58 views of your post in the feed

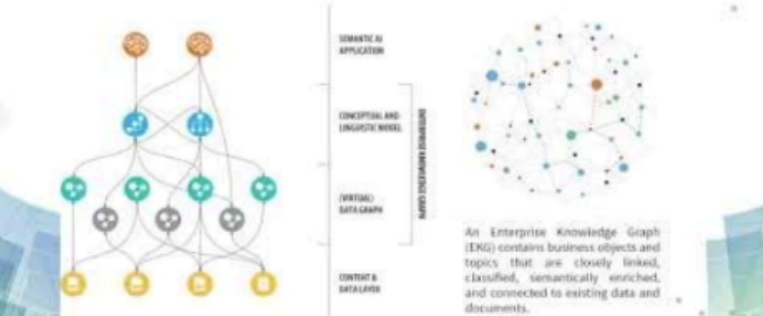


Lynx Project
Building the Legal Knowledge Graph for Smart Compliance Services in Multilin...
1mo • 🔒

⋮

Join free [#LynxProject](#) webinar on 18.2.2021, 10.30am CET. Free Webinar on Lynx Services Platform (Part 2). More info: <https://lnkd.in/dFgiwpY> Registration: <https://lnkd.in/diWaWdy> [#compliance](#) [#compliancemanagement](#) [#legaltech](#)

What is an (Enterprise) Knowledge Graph (EKG)?



An Enterprise Knowledge Graph (EKG) contains business objects and topics that are closely linked, classified, semantically enriched, and connected to existing data and documents.

Lynx Webinar Series
lynx-project.eu • 2 min read

Figure 16 Lynx LinkedIn account

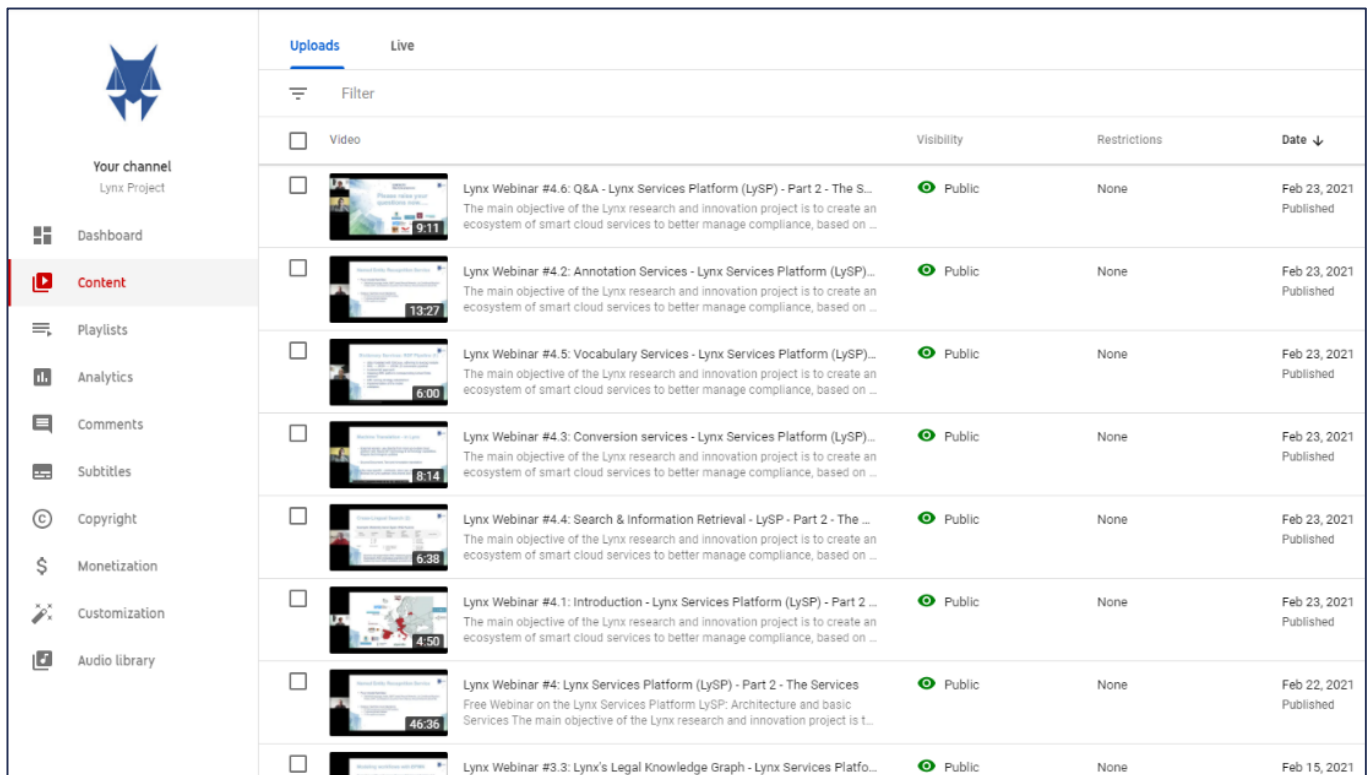
D6.6 | Final report on communication activities

30

3.4 YOUTUBE

Authorities across Europe have issued recommendations that strongly discourage face-to-face meetings and non-essential trips. Against this background, the audio-visual material has become a key material for dissemination and communication activities focused on stakeholders and general public. Therefore, the Lynx consortium has taken advantage of the YouTube channel²⁶ to upload different contents to spread the word regarding project's results and achievements. Figure 17 shows a screenshot of the Lynx YouTube account, it mainly contains:

- an overview of the Lynx project
- two LynxSP tutorials: time expressions and entity linking
- the webinars recordings: they include the whole webinar, and every webinar has been also split into sections to ease the visualization of just one part of the webinar



| Video | Visibility | Restrictions | Date ↓ |
|--|------------|--------------|---------------------------|
| <input type="checkbox"/> Lynx Webinar #4.6: Q&A - Lynx Services Platform (LySP) - Part 2 - The S... | Public | None | Feb 23, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #4.2: Annotation Services - Lynx Services Platform (LySP)... | Public | None | Feb 23, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #4.5: Vocabulary Services - Lynx Services Platform (LySP)... | Public | None | Feb 23, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #4.3: Conversion services - Lynx Services Platform (LySP)... | Public | None | Feb 23, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #4.4: Search & Information Retrieval - LySP - Part 2 - The ... | Public | None | Feb 23, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #4.1: Introduction - Lynx Services Platform (LySP) - Part 2 ... | Public | None | Feb 23, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #4: Lynx Services Platform (LySP) - Part 2 - The Services Free Webinar on the Lynx Services Platform LySP: Architecture and basic Services | Public | None | Feb 22, 2021 Published |
| <input type="checkbox"/> Lynx Webinar #3.3: Lynx's Legal Knowledge Graph - Lynx Services Platfo... | Public | None | Feb 15, 2021 |

Figure 17 Lynx YouTube account

Table 4 shows the list of the audio-visual content uploaded to the account (31 videos) and their statistics.

| Video name | Duration (in minutes) | Number of views ²⁷ |
|--|-----------------------|-------------------------------|
| Lynx H2020 Project Overview | 3:47m | 61 |
| Lynx Services Platform (LynxSP) – Time Expressions Service | 2:49m | 26 |
| Lynx Services Platform (LynxSP) – Entity Linking Service | 10:50m | 22 |
| Lynx Webinar #1: Compliance made easy | | |
| Compliance made easy: Lynx webinar #1 | 53:28m | 25 |

²⁶ <https://www.youtube.com/channel/UCiamvicw-ljxZla9M2Cjzeg>

²⁷ Last update: 15.03.2021

| | | |
|---|--------|-----------|
| Lynx webinar #1.1: Introduction | 3:28m | 11 |
| Lynx webinar #1.2: The Lynx project | 5:16m | 5 |
| Lynx webinar #1.3: Legal Knowledge Graphs | 8:37m | 7 |
| Lynx webinar #1.4: Legal Knowledge Graph model for Lynx | 7:29m | 5 |
| Lynx webinar #1.5: Pilots | 10:22m | 9 |
| Lynx webinar #1.6: Lynx Services Platform | 10:12m | 8 |
| Lynx webinar #1.7: Next Lynx Webinar Dates | 2:58m | 5 |
| Lynx webinar #1.8: Questions and Answers | 7:46m | 13 |
| Lynx webinar #1 Total | | 88 |

Lynx Webinar #2: 3 Business cases on top of the Lynx Legal Knowledge Graph

| | | |
|--|--------|-----------|
| 3 Business Cases on top of the Lynx Legal Knowledge Graph: Lynx webinar #2 | 58:20m | 30 |
| Lynx webinar #2.1: Introduction | 7:14m | 6 |
| Lynx webinar #2.2: Geothermal Energy use case | 14:43m | 14 |
| Lynx webinar #2.3: Contracts use case | 13:43m | 13 |
| Lynx webinar #2.4: Labour Law use case | 13:15m | 14 |
| Lynx webinar #2.5: Questions and Answers | 8:00m | 12 |
| Lynx webinar #2 Total | | 89 |

Lynx Webinar #3: Lynx Services Platform (LynxSP) – Part 1 – Overview

| | | |
|---|--------|-----------|
| Lynx Services Platform (LynxSP) – Part 1 – Overview | 51:19m | 9 |
| Lynx webinar #3.1: Introduction | 6:13m | 5 |
| Lynx webinar #3.2: Lynx architecture | 15:21m | 4 |
| Lynx webinar #3.3: Lynx Legal Knowledge Graph | 25:44m | 2 |
| Lynx webinar #3.4: Questions and Answers | 3:49m | 3 |
| Lynx webinar #3 Total | | 23 |

Lynx Webinar #4: Lynx Services Platform (LynxSP) – Part 2 – The Services

| | | |
|---|--------|-----------|
| Lynx Services Platform (LynxSP) – Part 2 – The Services | 46:36m | 13 |
| Lynx webinar #4.1: Introduction | 4:50m | 8 |
| Lynx webinar #4.2: Annotation Services | 13:27m | 3 |
| Lynx webinar #4.3: Conversion Services | 8:14m | 1 |
| Lynx webinar #4.4: Search and Information Retrieval | 6:38m | 3 |
| Lynx webinar #4.5: Vocabulary Services | 6:00m | 1 |
| Lynx webinar #4.6: Questions and Answers | 9:11m | 3 |
| Lynx webinar #4 Total | | 32 |

| | |
|--------------|------------|
| Total | 341 |
|--------------|------------|

Table 4 Lynx YouTube channel statistics

4 NEWSLETTERS

The Lynx project has released three newsletter issues that collected and summarised all the activities carried out during a specific period. Section 4.1 shows the three issues content and reports on some statistics about the recipients and open and click events. Moreover, the Lynx consortium also contributed to other newsletters to disseminate and communicate its achievements to different stakeholders: KD Newsletter and BDVA newsletter. Section 4.2 is focused on two contributions issued to K Dictionaries and BDVA newsletters.

4.1 LYNX NEWSLETTER

One communication channel used by the Lynx project is the Newsletter. Table 5 shows the 3 newsletter issues description, launch date and link to PDF versions uploaded to the Lynx SlideShare channel. These issues contain a mix of Lynx project description, events attended and organized by Lynx partners, meetings between Lynx partners, data sources made openly accessible by the Lynx project, and other activities such as accepted papers on conferences or workshops. Moreover, the newsletter is also useful to disseminate tools that the Lynx project has been working out. For instance, the LKG and the API services that are available at the Lynx website. The webinars schedule and their recordings are also key materials for the newsletter issues.

| Issue | Description | Launch date | Link |
|-------|--|--------------------------------|----------------------------------|
| #1 | In this newsletter readers will find news and events related to the Lynx project, such as, updates on release of new content in the Lynx home page data portal, achievements, meetings and other public information such as the project website http://lynx-project.eu . | 16 th May 2019 | Link to issue #1 |
| #2 | The Lynx consortium has set up a Lynx Webinar Series for 2020/2021 to bring the project itself as well as the most outstanding achievements to SMEs, LegalTech companies and the public. The Lynx YouTube channel has been also released and, to inaugurate the channel, a Lynx Overview video has been shot and edited. In this video, Elena Montiel-Ponsoda, as project coordinator, explains the challenges that the consortium faced and the features that will bring the Lynx Services beyond the state-of-the-art. Lynx has been present at one of the most relevant international conferences on innovative Language Technologies, META-FORUM. Due to the COVID-19 pandemic, this year META-FORUM 2020 goes virtual. Lynx's general usage scenarios and how the Lynx consortium enabled them from an architectural viewpoint is the main topic of Artem Revenko's (Semantic Web Company) post. This post addresses the requirements posed by legal consultancy experts and how the consortium has designed and implemented the Lynx Services Platform (LynxSP). | 26 th November 2020 | Link to issue #2 |
| #3 | Webinar Special Issue of the Lynx Newsletter. During the months of December 2020 to February 2021, the Lynx consortium conducted the Lynx Webinar Series, presenting the project and its most outstanding achievements to SMEs, LegalTech companies and the public. The first webinar provided an overview of and insights in the Lynx project, the Legal Knowledge Graph and its application to Lynx, and the Lynx architecture, services and pilots. The second webinar provided insights into the compliance services related to the three pilots of Lynx and their objectives, requirements and technical solutions in the domains of labour law, contract analysis and management, and | 1 st March 2021 | Link to issue #3 |

geothermal energy compliance recommender. The third webinar focused on a technical audience, providing insights into the overall architecture of the Lynx Services Platform and details and demos of the basic services: document manager, workflow manager, API manager, and authorization & identity management. On top of that, the fourth webinar demonstrated these services: Named Entity Extraction, Relation Extraction, Question-Answering, Machine Translation and Lexicala cross-lingual lexical data.

The Lynx YouTube channel contains all the recordings of the Lynx Webinar Series as well as demos for the Time Extraction and Entity Linking Services. Moreover, the SlideShare channel stores the slide decks used in the four webinars.

Table 5 Lynx newsletter issues briefing

After an exhaustive review of newsletter providers in the market, the Lynx Consortium has finally chosen MailerLite. MailerLite is a simple email marketing solution for all types of businesses. The key idea behind this solution is simplicity. It provides a simple and user-friendly content editor, simplified subscriber management, and campaign reports with the most important statistics. In addition, accounts with less than 1,000 subscribers and less than 12,000 e-mails/month are free of charge. Thus, the use of MailerLite as a newsletter distribution tool does not impact on the budget of the project.




| | | | | |
|---|--|--------------------------|-------------------------|-------------------------|
|  | Lynx H2020 project Newsletter: Webinars special issue Regular · 2021-03-01 | 110 recipients | 27.88% opened | 2.88% clicked |
|  | Lynx H2020 project Newsletter #2 Regular · 2020-11-26 | 99 recipients | 27.17% opened | 6.52% clicked |
|  | Lynx H2020 project Newsletter #1 Regular · 2019-05-16 | 88 recipients | 44.71% opened | 7.06% clicked |

Figure 18 Lynx Newsletter issues statistics overview.²⁸

Figure 18 depicts the statistics regarding the 3 issues released by the Lynx consortium: number of recipients, e-mails opened and click events. These recipients include members of the Advisory and Industry Boards of the project.

²⁸ Last update: 05.03.2021

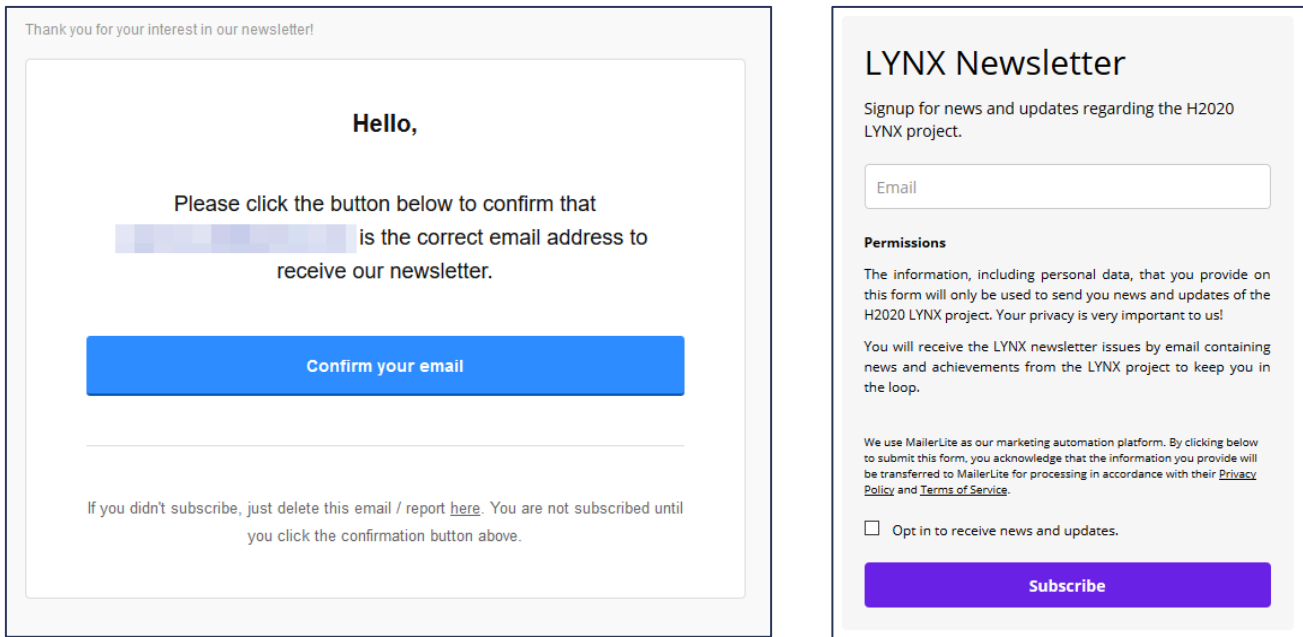


Figure 19 Left: Confirmation e-mail and verification once an individual fill in the subscribe form; Right: Subscribe form to the Lynx newsletter

Figure 19 (Right) depicts the Lynx newsletter subscribe form available at: <http://lynx-project.eu/join-us/newsletter>. A legal notice has been included in the subscribe form explaining the collection of personal data. In particular, this subscription form requires the e-mail as the only information needed to subscribe to the newsletter. It also contains information about the permissions that the subscriber grants regarding the use of her/his e-mail. In addition, the subscribe form also reports that MailerLite is the company that will handle the e-mails and it is also possible to check MailerLite’s privacy policy and terms of use. The Lynx Consortium has reviewed the privacy policy and the terms of use and none of them raises any ethical concern. Moreover, MailerLite is an entity based-on Europe, therefore, it complies with the European General Data Protection Regulation and all relevant legislation at the EU level.

4.2 LYNX CONTRIBUTION TO OTHER NEWSLETTERS

4.2.1 KD Newsletter

On July 2018, Lynx partners contributed to Kernerman Dictionary (KD) newsletter. This newsletter covers a wide range of topics related to terminology and lexicography. The text is available at: https://kdictionaries.com/kdn/kdn26_2018.pdf pages 2-5.

4.2.2 Big Data Value PPP

The Big Data Value eCosystem Project (BDVe) provides coordination and support for the H2020 projects within the Big Data Value Public-Private Partnership.²⁹ (BDVA PPP), effectively combining in a consortium Large Enterprises, SMEs and Academia. At the time of writing this document, 50 H2020 projects related to Big Data are part of this initiative.

The BDVA PPP regularly publishes a newsletter that collects and disseminate the major achievements and updates on the Big Data projects that are currently being developed in Europe. Moreover, the BDVA 2019.³⁰ annual report [4] stated that the BDVA newsletter has 2,000 subscribers. Therefore, the Lynx consortium took advantage of this publication to communicate the Lynx Webinar Series to the whole

²⁹ <https://www.big-data-value.eu/>

³⁰ At the time of writing this document, the 2020 annual report was not published yet

BDVA PPP community. The publication implemented by the Lynx consortium that was published on 22nd December 2020 is available online at: <https://www.big-data-value.eu/lynx-webinar-series/>. Afterwards, the Lynx consortium also contributed to the March 2021 newsletter issue that collected all the recordings and slides from the Lynx webinars. This second contribution is available at: <https://www.big-data-value.eu/lynx-publishes-webinar-series/>.

5 EVENTS & PRESS RELEASES

Events attended and organized by Lynx partners for the period M1-M18 are reported in Table 6, for the period M19-M24 in Table 7, and for M25 to M40 in Table 8. These events are relevant from a communication point of view since they enable the communication of the project and to distribute the project identity set provided in D6.1 [1].

| Date | Event |
|--|--|
| November 13-14, 2017, Brussels (Belgium) | META-FORUM 2017 |
| December 13, 2017, Luxemburg (Luxemburg) | JURIX 2017 - International conference on Legal Knowledge and Information Systems (1st Workshop on Technologies for Regulatory Compliance) |
| February 17, 2018, Ljubljana (Slovenia) | Elexis kick-off meeting - European Lexicographic Infrastructure |
| April 17, 2018, Vienna (Austria) | Data Privacy W3C Workshop |
| May 3-4, 2018, Madrid (Spain) | PDP4E kick-off meeting - Privacy and Data Protection for Engineers |
| May 14-15, 2018, Sofia (Bulgaria) | Big Data Value Meet-up |
| May 7-12, 2018, Miyazaki (Japan) | LREC - International Conference on Language Resources and Evaluation (Workshop on Language Resources and Technologies for the Legal Knowledge Graph) |
| May 18-19, 2018, Beijing (China) | GAITC - The Global Artificial Intelligence Technology Conference |
| June 3-7, 2018, Crete (Greece) | Extended Semantic Web Conference |
| September 10-13, 2018, Vienna (Austria) | Semantics Conference |
| September 19, 2018, Barcelona (Spain) | Fabra avui conference |
| October 2, 2018, Brussels (Belgium) | EUDATATHON |
| October 11-12, 2018, Florence (Italy) | Law via the Internet 2018 – Knowledge of the Law in the Big Data Age |
| November 5-7, 2018, Madrid (Spain) | ECETT conference - Encuentros Complutenses en torno a la Traducción |
| November 12-14, 2018, Vienna (Austria) | European BIG DATA VALUE Forum |
| February 21-23, 2019, Salzburg (Austria) | IRIS Conference (Internationales Rechtsinformatik Symposium) |
| December 13, 2018, Groningen (The Netherlands) | 2 nd TeReCom Workshop celebrated in Groningen (Organized by Lynx partners) |
| March 20, 2019, Boston (USA) | Enterprise Data World in Boston |
| April 29-May 1, Melbourne (Australia) | Conference on Law and Technology |
| May 2, Melbourne (Australia) | Post-Conference Symposium. The Regulation of the Web of Linked Data. |
| May 20-23, 2019, Leipzig (Germany) | LDK 2019 – 2 nd Conference on Language, Data and Knowledge |
| May 20, 2019, Leipzig (Germany) | TIAD 2019 – Translation Inference Across Dictionaries |

Table 6 Events attended and co-organised by Lynx partners during M1-M18 period

| Date | Event |
|---|---|
| June 2-6, 2019, Portorož (Slovenia) | ESWC 2019 - Extended Semantic Web Conference |
| June 6-7, 2019, Minneapolis (USA) | Workshop on Natural Legal Language Processing (NLLP) co-located with NAACL 2019 - Conference of the North American Chapter of the Association for Computational Linguistics |
| June 8, 2019, Madrid (Spain) | LegalHackers Madrid Meet-up |
| June 24-25, 2019, Brussels (Belgium) | 8th Language Technology Industry Summit |
| June 26-28, 2019, Riga (Latvia) | BDV PPP Meetup 2019 - Big Data Value Public-Private Partnership |
| August 10-16, 2019, Macao (China) | IJCAI 2019 - International Joint Conferences on Artificial Intelligence |
| August 26-29, 2019, Linz (Austria) | International Workshop on Machine Learning and Knowledge Graphs |
| September 9-12, 2019, Karlsruhe (Germany) | SEMANTICS 2019 |
| September 23-24, 2019, Vienna (Austria) | Research Meets Practice (REMEP) conference of Legal Informatics 2019 |
| October 8-9, 2019, Brussels (Belgium) | META-FORUM 2019 |
| October 26-30, 2019, Auckland (New Zealand) | AI4LEGAL workshop at International Semantic Web Conference |
| October 29-31, 2019, Dublin (Ireland) | Language and Knowledge Engineering (LKE) Conference |
| December 11-13, 2019, Madrid (Spain) | JURIX 2019 - International Conference on Legal Knowledge and Information Systems |
| December 11-13, 2019, Madrid (Spain) | JURIX Industry 2019 |

Table 7 Events attended and co-organised by Lynx partners during M19-M24

| Date | Event |
|-----------------------------------|---|
| March 7, 2020, Madrid (Spain) | Open Data Day 2020 |
| June 2-4, 2020, Online event | #STAYENGAGED Geothermal Event |
| June 2-4, 2020, Online event | Extended Semantic Web Conference (ESWC) 2020 |
| June 18-23, 2020, Online event | Research Meets Practice (ReMeP) 2020 |
| December 9-11, 2020, Online event | JURIX Conference 2020 |
| December 1-3, 2020, Online event | META-FORUM 2020 |
| March 12, 2021, Online event | Legal Terminology Workshop (TERMCOORD) 2021 |
| March 16-19, 2021, Online event | The European Data Conference on Reference Data and Semantics (ENDORSE) 2021 |
| April 8, 2021, Online event | 9th Annual Codex FutureLaw conference (organised by the Sandford Centre for Legal Informatics) 2021 |

Table 8 Events attended and co-organised by Lynx partners during M25-M40

On top of that, The Lynx Consortium has contributed to one press release that introduces the project in one of the most relevant online publications about innovation in Spanish³¹. The press release can be found online [5].

³¹ Innovaspain.com available at: <https://www.innovaspain.com/>

6 WEBINARS

During the months of December 2020 to February 2021 (M37 to M39), the Lynx consortium conducted 4 webinars, presenting the project and its most outstanding achievements to SMEs, LegalTech and RegTech companies, and the public. The following sections address the topic and agenda of each webinar, the date, the slides and recording links, and a screenshot of the corresponding recording. The Lynx YouTube channel contains all the recordings of the Lynx Webinar Series and the SlideShare channel stores the slide decks used in the 4 webinars.

6.1 WEBINAR #1: COMPLIANCE MADE EASY

The first webinar provided an overview of and insights in the Lynx project, the Legal Knowledge Graph and its application to Lynx, and the Lynx architecture, services and pilots. Table 8 shows the topic and agenda addressed in the webinar, the date, the slides and recording links and a reference to a recording screenshot.

| Lynx webinar #1 | | | |
|-----------------|---|---------------------|-----|
| Topic / Agenda | <ul style="list-style-type: none"> • The Lynx project. Elena Montiel Ponsoda, Lynx project lead, Universidad Politécnica de Madrid • Legal Knowledge Graph: What is this & what is it good for. Martin Kaltenböck, Lynx Innovation Manager, Co-Founder and CFO of Semantic Web Company, SWC • The Lynx Legal Knowledge Graph Model. Victor Rodriguez Doncel, Lynx Scientific Manager, Universidad Politécnica de Madrid • Lynx Services Platform (LynxSP): Architecture & Services. Artem Revenko, Director of Research & Innovation, SWC • The 3 Pilots of Lynx: labor law, contract management, geothermal energy compliance. Christian Sageder, Managing Director, Cybly GmbH | | |
| Date | 10.12.2020 | | |
| Slides | Lynx webinar #1 slides | Views ³² | 348 |
| Recording | Lynx webinar #1 recording | Views ³³ | 25 |
| Screenshot | Figure 20 Lynx webinar #1 | | |

Table 9 Lynx webinar #1 details

³² Last update: 15.03.2021

³³ Last update: 15.03.2021

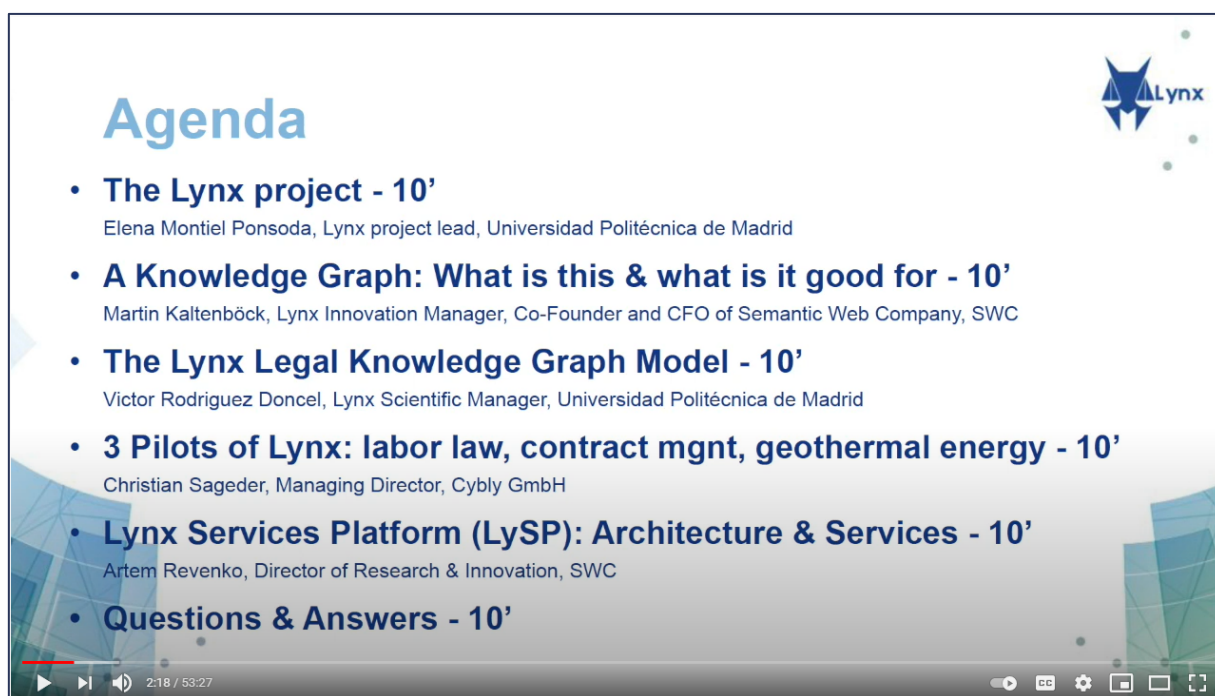


Figure 20 Lynx webinar #1

6.2 WEBINAR #2: 3 BUSINESS CASES ON TOP OF THE LYNX LEGAL KNOWLEDGE GRAPH

The second webinar provided insights into the compliance services related to the three pilots of Lynx and their objectives, requirements and technical solutions in the domains of labour law, contract analysis and management, and geothermal energy compliance recommender. Table 9 shows the topic and agenda addressed in the webinar, the date, the slides and recording links and a reference to a recording screenshot.

| Lynx webinar #2 | | | |
|-----------------|--|---------------------|----|
| Topic / Agenda | <ul style="list-style-type: none"> • Moderation: Martin Kaltenböck (Co-Founder and CFO of Semantic Web Company, SWC) • Introduction: Elena Montiel-Ponsoda (Lynx project lead, Ontology Engineering Group, Universidad Politécnica de Madrid) • Labor law Pilot, Cuatrecasas, Pascual Boil (Consultancy and Applications Director at CUATRECASAS) • Contract Analysis Pilot, Cybly, Christian Sageder (Managing Director at Cybly GmbH) • Geothermal Energy Compliance, DNV.GL, Pieter Verhoeven (Senior Consultant / Digital Innovation Manager at DNV GL) | | |
| Date | 14.01.2021 | | |
| Slides | Lynx webinar #2 slides | Views ³⁴ | 47 |
| Recording | Lynx webinar #2 recording | Views ³⁵ | 30 |
| Screenshot | Figure 21 Lynx webinar #2 | | |

³⁴ Last update: 15.03.2021

³⁵ Last update: 15.03.2021

Table 10 Lynx webinar #2 details



Figure 21 Lynx webinar #2

6.3 WEBINAR #3: LYNX SERVICES PLATFORM (LYNXSP) – PART 1– OVERVIEW

The third webinar focused on a technical audience, providing insights into the overall architecture of the Lynx Services Platform and details and demos of the basic services: document manager, workflow manager, API manager, and authorization & identity management. Table 8 shows the topic and agenda addressed in the webinar, the date, the slides and recording links and a reference to a recording screenshot.

| Lynx webinar #3 | | | |
|-----------------|---|---------------------|----|
| Topic | <ul style="list-style-type: none"> • Introduction & Moderation: Martin Kaltenböck (Co-Founder and CFO of Semantic Web Company, SWC) • LynxSP Architecture, Filippo Maganza (Software Developer at Alpenite) and Sotiris Karampatakis (Senior Researcher at Semantic Web Company) • LynxSP Basic Services, Filippo Maganza (Software Developer at Alpenite) and Victor Mireles-Chavez (Senior Researcher at Semantic Web Company) | | |
| Date | 11.02.2021 | | |
| Slides | Lynx webinar #3 slides | Views ³⁶ | 20 |
| Recording | Lynx webinar #3 recording | Views ³⁷ | 9 |
| Screenshot | Figure 22 Lynx webinar #3 | | |

Table 11 Lynx webinar #3 details

³⁶ Last update: 15.03.2021

³⁷ Last update: 15.03.2021



Figure 22 Lynx webinar #3

6.4 WEBINAR #4: LYNX SERVICES PLATFORM (LYNXSP) – PART 2 – THE SERVICES

Finally, the fourth webinar demonstrated these services: Named Entity Extraction, Relation Extraction, Question-Answering, Machine Translation and Lexicala cross-lingual lexical data. Table 11 shows the topic and agenda addressed in the webinar, the date, the slides and recording links and a reference to a recording screenshot. Table 9 shows the topic and agenda addressed in the webinar, the date, the slides and recording links and a reference to a recording screenshot.

| Lynx webinar #4 | | | |
|-----------------|---|---------------------|----|
| Topic / Agenda | <ul style="list-style-type: none"> • Introduction & Moderation: Martin Kaltenböck (Co-Founder and CFO of Semantic Web Company, SWC) • LynxSP Services - Introduction and Overview, Artem Revenko (Director of Research & Innovation, Semantic Web Company) • LynxSP Services, Ruben Martinez (Manager Customer Service, Tilde), Ilan Kernerman (CEO at Lexicala by K Dictionaries), Christian Sageder (CEO of Cybly), Victor Mireles-Chavez (Senior Researcher, SWC), Julian Moreno (Researcher at DFKI), Victor Rodriguez Doncel (Assistant Lecturer, Artificial Intelligence Department, UPM). | | |
| Date | 18.02.2021 | | |
| Slides | Lynx webinar #4 slides | Views ³⁸ | 26 |
| Recording | Lynx webinar #4 recording | Views ³⁹ | 12 |
| Screenshot | Figure 23 Lynx webinar #4 | | |

Table 12 Lynx webinar #4 details

³⁸ Last update: 15.03.2021

³⁹ Last update: 15.03.2021



Agenda

- **Introduction & the Lynx project - 5'**
Martin Kaltenböck (Co-Founder and CFO of Semantic Web Company, SWC)
- **Lynx Services Platform: The Services - Introduction - 5'**
Artem Revenko (Director of Research & Innovation, Semantic Web Company)
- **Lynx Services Platform: The Services in Detail - 40'**
María Navas-Loro (Ontology Engineering Group, Artificial Intelligence Department, UPM), Julian Moreno (Researcher at DFKI), Ruben Martinez (Manager Customer Service, Tilde), Pablo Calleja (Ontology Engineering Group, Artificial Intelligence Department, UPM), Ilan Kernerman (CEO at Lexicala by K Dictionaries), Christian Sageder (CEO at Cybly).
- **Questions & Answers - 10'**

Figure 23 Lynx webinar #4

7 CONCLUSIONS

The Lynx website has been acting as a public repository for project's descriptions, public documents, publications and resources (data model, data portal, LKG, services, related ontologies and terminologies). On top of that, the website has been also a main communication channel to spread the word of the results and the achievements reached by the project consortium. The most recent news and audio-visual materials created and edited by the Lynx consortium have been uploaded and/or linked within the different website sections. Additionally, the Lynx consortium set up a Lynx Zenodo Community that contains the most relevant public documents related to the project. As an overview of the statistics provided by the Zenodo community, all the public deliverables uploaded report 3,740 views and 3,927 downloads.

The social media channels have been also a pillar within the communication strategy. The Twitter, LinkedIn, SlideShare and YouTube Lynx accounts have covered a wide range of audiences: business, stakeholders, academia, and public at large. Currently, the twitter account counts with 243 followers and 195 tweets that in some 28-days periods reached more than 6,500 impressions and 429 profile visits. Then, the LinkedIn account reports 100 connections from the project's profile; SlideShare accumulates 967 visualizations; and, finally, the YouTube Lynx profile provides 31 audio-visual different materials (webinars; LynxSP services tutorials; and a project overview) that collect 341 visualizations in total.

The Lynx consortium has released three different issues of the Lynx newsletter. The first and second issues were focused on the project overview, events attended and co-organized by the project, and services provided by the Lynx consortium. The third issue was a webinars special issue, and it was focused on the slide decks and recordings of the 4 webinars designed and implemented by the Lynx project and its partners. The number of subscribers has been increasing with each issue: from 88 to 110 subscribers. Moreover, the Lynx partners also contributed to two more newsletters: firstly, the KD Newsletter published an overview of the Lynx project; secondly, the Big Data Value newsletter published the webinar programme and the register links.

Conferences, workshops, fairs, press releases, and in general, all kind of events dreamed to compliance stakeholders, academia, and business are relevant from a communication perspective, since they enable the communication of the project and to distribute the project identity set provided in D6.1 [1]. In this document all the events attended and/or co-organised by Lynx partners are listed. Deliverable D6.7 "Final report on dissemination and exploitation" has a section specifically devised to discuss the dissemination carried out in events during the project lifespan.

Finally, the COVID-19 pandemic has affected all face-to-face activities since February 2020. Consequently, the Lynx consortium reshaped some parts of the communication activities. The activity that suffered the greatest impact of the pandemic is the Lynx final event that was reported on D6.3 [2]. As mentioned above, face-to-face meeting were strongly discouraged by public authorities, causing the postponement or even cancellation of some of the main conferences, workshops and fairs in which the Lynx consortium was considering to co-allocate the Lynx final event. Although some of these events were online, the Lynx consortium decided to design and implement a series of 4 online webinars that went through the Lynx LKG, the Lynx architecture, the Lynx Services Platform (LynxSP) and the services released. All these webinars are publicly available on the Lynx YouTube channel and report 341 views.

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