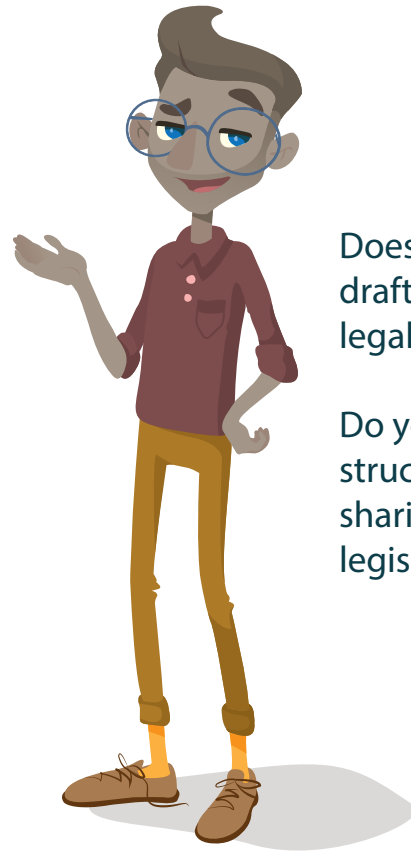




2016.38 Legislation  
Interoperability Tools -LegIT

# LEOS



Does your organisation draft or edit legal texts?

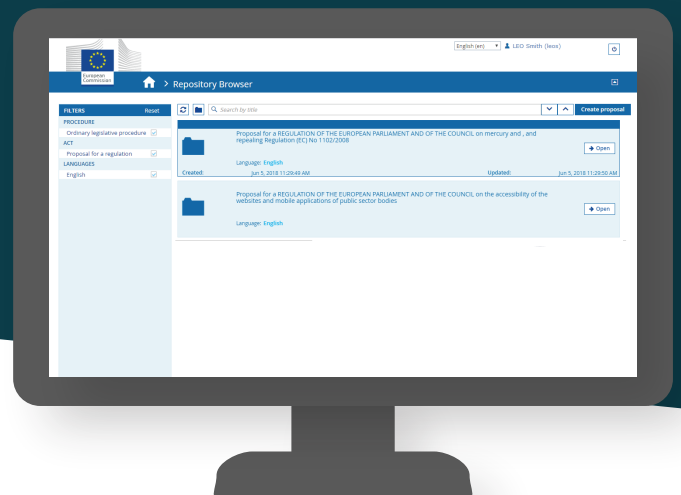
Do you struggle with structuring, formatting, sharing or processing legislation?

**Mr. Leo S. to the rescue!**

**Our mission is to make legislation drafting more efficient, so we created a software tool to help people draft legal texts.**

The action (LegIT - 2016.38. Legislation Interoperability Tools) is led by Secretariat-General and Directorate-General for Informatics at the European Commission and funded by ISA2 programme.

LEOS is designed to help those involved in drafting legislation, which is usually part of a complex process, by **facilitating efficient online collaboration**. Comments, suggestions, version control, co-edition, everything is there. Regarding the structure, that is where we aim to be as restrictive as possible and this is not because we are conservative, but because this helps the drafters follow the rules and avoid mistakes.



# Timeline

## Q4 2015

### First results under ISA

#### *ISA Action 1.13 LEOS*

In Q4 2015, the ISA Action 1.13 funded under the ISA Programme ends, delivering a study on existing solutions and various proof of concepts.

## Q2 2016

### LEOS action becomes LegIT

#### *ISA<sup>2</sup> Action 2016.38 LegIT*

LEOS action becomes LegIT under ISA<sup>2</sup> but keeping the name LEOS for the prototype and plans new reusable building blocks like Ref2Link and an open implementation of CMIS.

## Q3 2017

### LEOS-Pilot

#### *Major milestone achieved*

Pilot launched across the Commission services. Council of the European Union selects LEOS for internal use.

## Q3 2018

### Continuous improvements

#### *New building blocks to be added*

CMIS implementation, Ref2Link (automatic links to Official Journal creation based on known text patterns) and Hypothes.is integration.

# Features

## Collaboration

Losing time exchanging and managing different versions with your drafting partners?  
LEOS is built as an online authoring tool, a single online workspace for all contributors, offering simultaneous collaboration on one draft.

## Structure

If the structure is your challenge, our solution deals with the creation of acts from a template, and has all further editions subject to predefined structure rules.

Additionally, there is no need to worry about the internal references, they are automatically created and updated.

## Review / comments

Features for review, comments or suggestions which can be approved (or rejected) and merged directly in the text are also available. The solution includes also the track changes option.

## Versioning

All versions are centrally stored and protected using role based access control rules.

With this feature, the users can have instant comparisons between successive versions and the timeline is visually displayed and easy to manage.



## Rich text

If the text needs to be enriched with images, tables and mathematical formula, this is also possible. The rich text can be added as-is and can be customized by adding plugins.

## Import

If you need to reuse some text from existing sources like the Official Journal of the European Union, you can use the import feature. You can import some or all recitals and articles of an act.

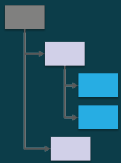
# Reuse options



## **COLLABORATION**

Generic feature

Instead of a local software to edit documents, our solution enables online collaboration. This feature can be reused and integrate your own user management database.



## **STRUCTURE**

Customisable feature

We use LegalDocumentML and we have implemented the structure rules agreed by the European institutions. The rules can be changed to support your legislative tradition.



## **REVIEW / COMMENTS**

Generic feature

Each user that has access to a draft, depending on his/her role, can add comments and suggestions, search and filter comments.



## **VERSIONING**

Generic feature

Version management becomes complicated especially when there is the case of several editors. The versioning feature, which can be reused as-is.



## **IMPORT**

Customisable feature

The import feature retrieves the text in XML from the source repository and transforms it into LegalDocumentML compatible with LEOS. If the imported source is already in this format, no change needs to be done. If not, a transformation routine will be required.



## **RICH TEXT**

Configurable/  
customizable

The current version allows the user to add pictures, tables, mathematical formulas. The add image feature is enabled only for the annexes but it can be configured to be added in other elements of a draft.

# Technologies used

## Annotation services

**h.** [hypothes.is](https://hypothes.is)



**vaadin**>



CKEditor 4



Ref2Link

## Web-app front end

## Web-app back-end



Directory connector



VTD-XML

<FreeMarker>



LegalDocML

Akoma Ntoso

Spring



Open source  
And available  
in the package

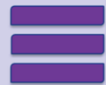


Other possible  
integrations not  
available in the  
package



## Integration service

**CMIS**



Implementation  
coming soon  
as open source



# Contact us!

## e-mail:

DIGIT-LEOS-FEEDBACK  
@ec.europa.eu

## Twitter:

@EU\_isa2  
isa@ec.europa.eu

## Links:

ISA - <https://ec.europa.eu/isa2>

[https://ec.europa.eu/isa2/actions/open-source-software-editing-legislation\\_en](https://ec.europa.eu/isa2/actions/open-source-software-editing-legislation_en)

Joinup - <https://joinup.ec.europa.eu/solution/leos-open-source-software-editing-legislation>

## Feedback:

<https://ec.europa.eu/eusurvey/runner/1b604641-cc22-9dc7-70bf-bc69724bf78f>

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