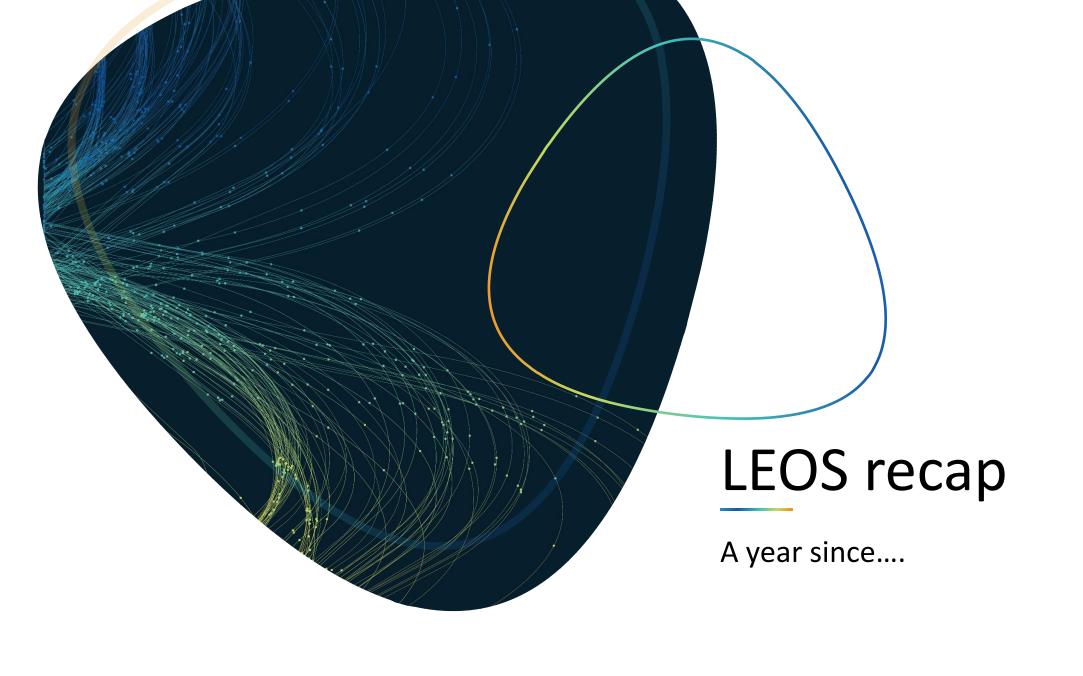


#### Agenda

01 LEOS Recap LEOS Product Version 5.x 02 From Editing to Drafting 03

... And More and Beyond



#### **LEOS**

Manage the
complexity of drafting
legislation and
developing policies

Teamwork through efficient online collaboration
Web usability
Accessibility for all

A solution to allow drafters to concentrate on substance of the text
Multi-lingualism
Spell and grammar checker

Step towards a single data space that contains all information on a given act

Provide a seamless interaction
between drafting and decisionmaking workflows reducing
manual interventions in the
process

Essential component to cover the full law-making lifecycle





Reuse text



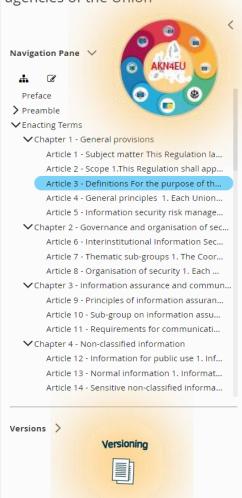


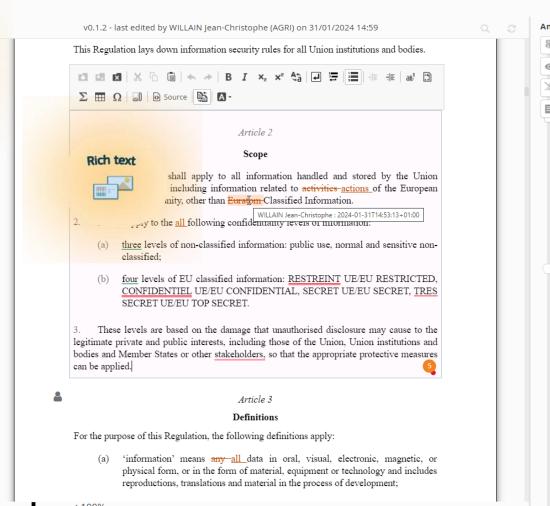
Home > Proposal View > Legal Act

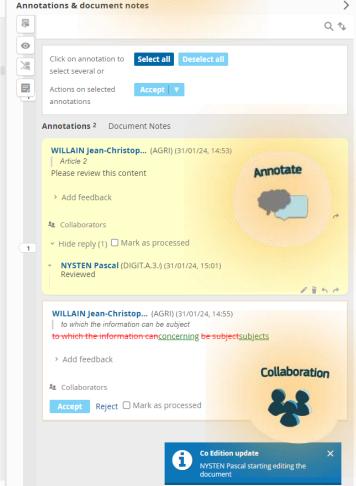
Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on information security in the institutions, bodie agencies of the Union



Actions : Close







# LEOS -Product Version 5.x

A robust open-source legal drafting solution

#### Richer functionality

- Smart track changes
- Multi-lingual
- Multi-lingual open-source spell and grammar checker

#### Improved user experience

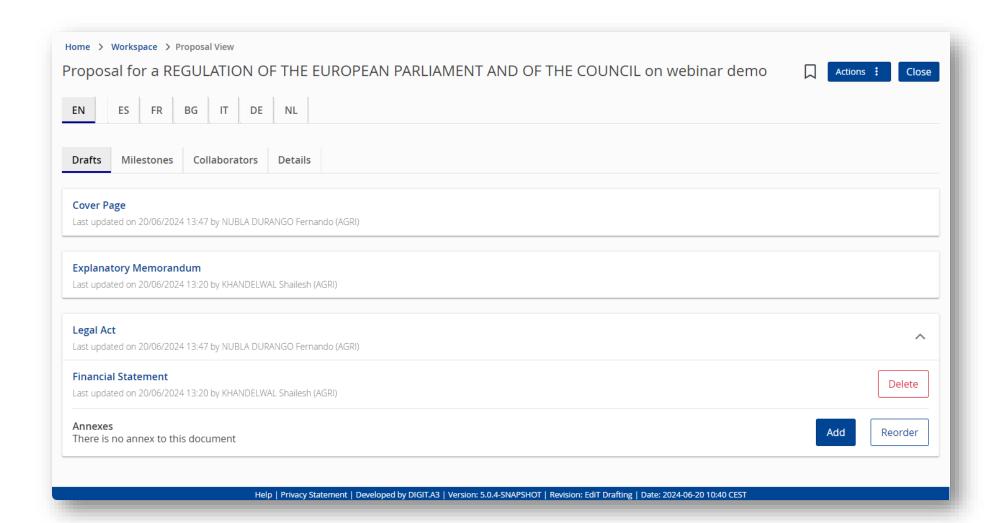
- New more intuitive user interface based on Angular
- New more performant document repository based on Oracle and MySQL
- Improved integration and configurability

#### Product support

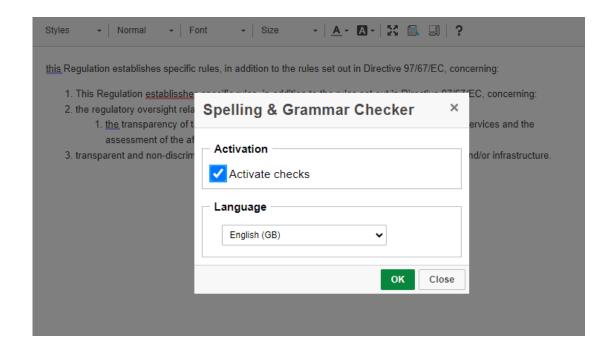
- Documentation
- Service desk
- Community

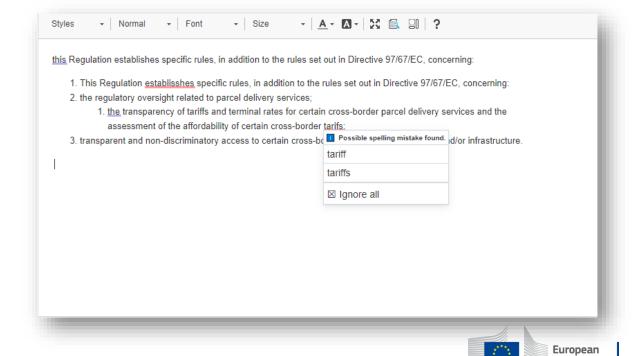


#### LEOS Multi-lingual



# Open-source multi-lingual spell checker



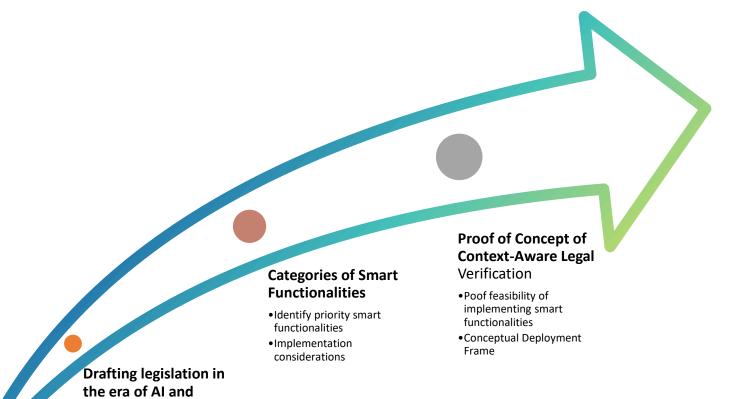


## From Editing to Drafting A journey

Landmarks and learnings

#### From Editing to Drafting - A journey

DigitisationAugmented LEOSSmart functionalities



## Smart functionalities A bridge between editing and drafting (1/2)

Context-Aware Legal Verification

- Being explored
  - PoC on Normative References
  - PoC on Definitions

Fine Granular Change Tracking

- Implemented
  - Track changes in LEOS 5.0

Linguistic Support

- Under development
  - Open-source spell and grammar checker for English, German and French

## Smart functionalities A bridge between editing and drafting (2/2)

**Automated Legal Drafting** 

- Being explored
  - PoC on suggesting preamble based on LLM

Legal Assistance

- Implemented
  - Drafting Assistance Package (DAP) in LEOS 5.0

Input on Policy Dimension

- Being explored
  - Regulatory reporting requirements

Discovery of Legal Practices and Advanced Visualisation

- Related with
  - EU Legal Acquis Management

#### Focus on Proof of Concepts

### Context-Aware Verification of

#### Legal definitions

- Suggest definitions using
- Similarity in topic
- Consistency in context
- Validity in time

#### Normative references

- Suggest normative references based on
- Pertinence to topic
- Validity in time
- And check
- Correctness of syntax

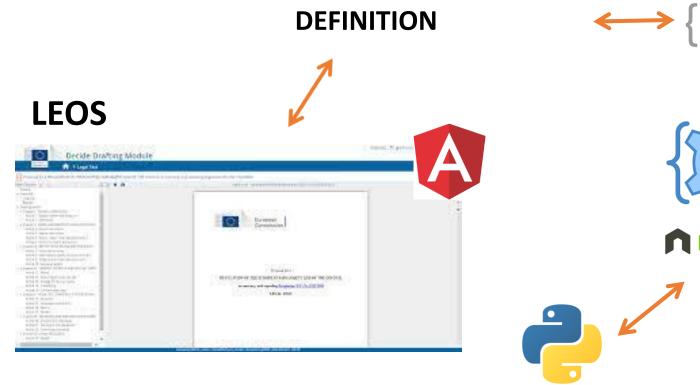
## Identification and Annotation of

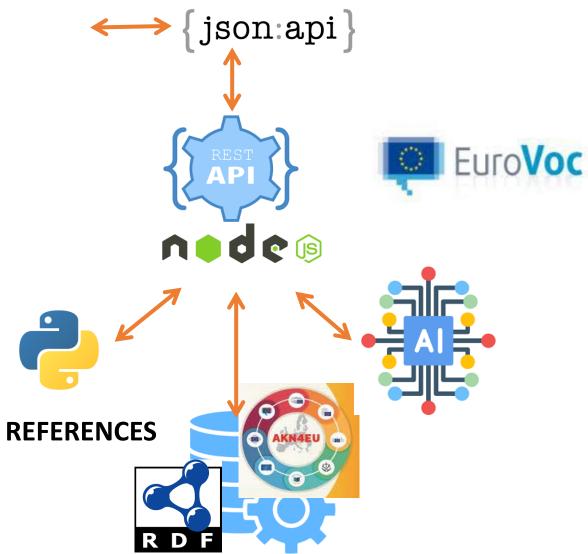
**Regulatory Reporting Requirements** 

Identification of reporting requirements

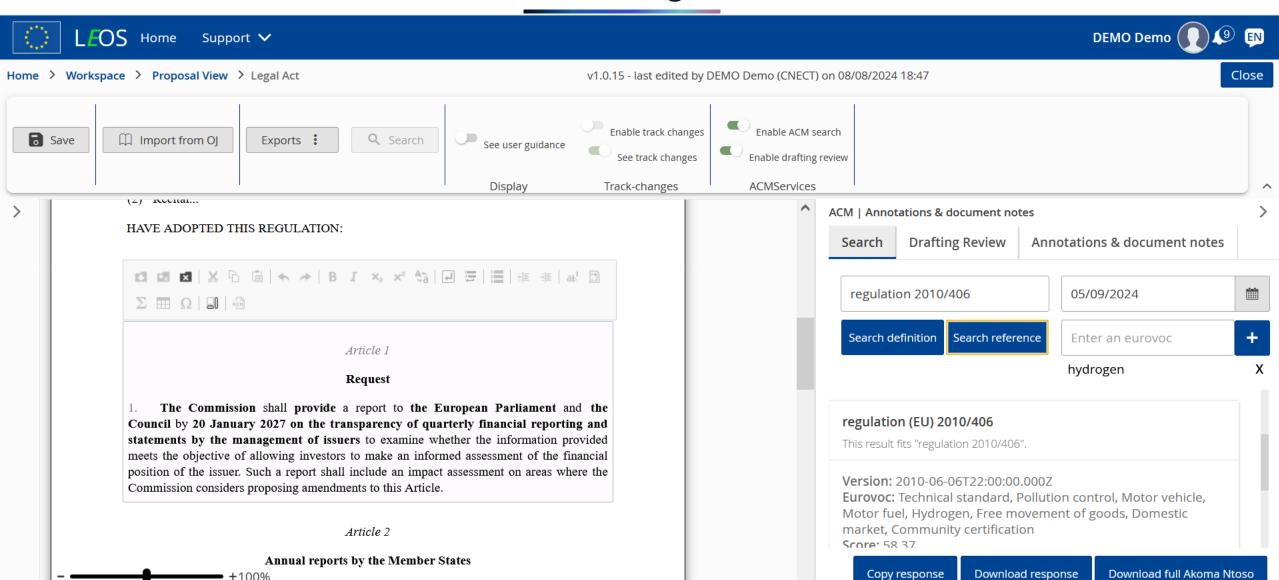
- Facilitated evaluation of overlaps and duplications of legal requirements,
- Easier discovery and reuse of data
- Enabling complex queries on legal texts

#### **Context-Aware Legal Verification**

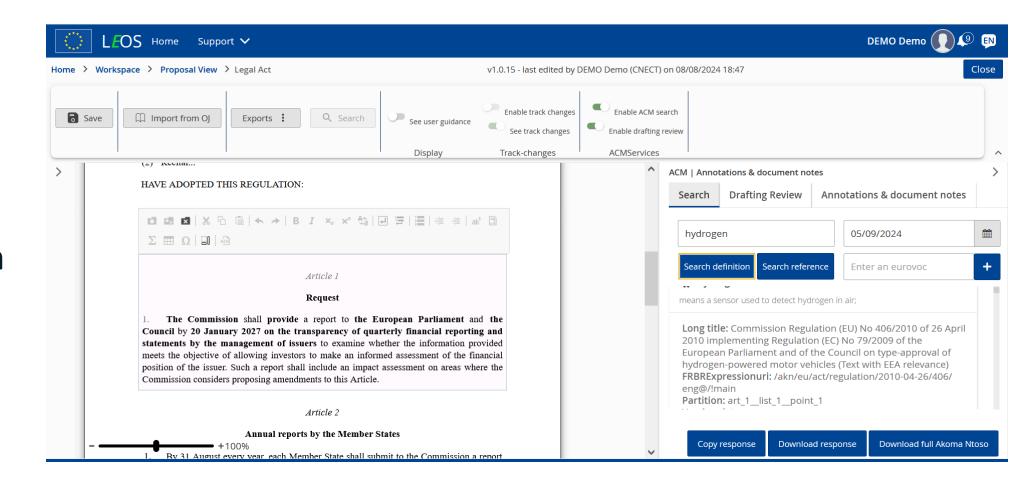




#### **Context-Aware Legal Verification**



### Context-Aware Legal Verification



#### Anatomy of «Reporting Requirement Clause»

Article 6
Interim management statements

**Action** 

**ActionResult** 

**Event** 

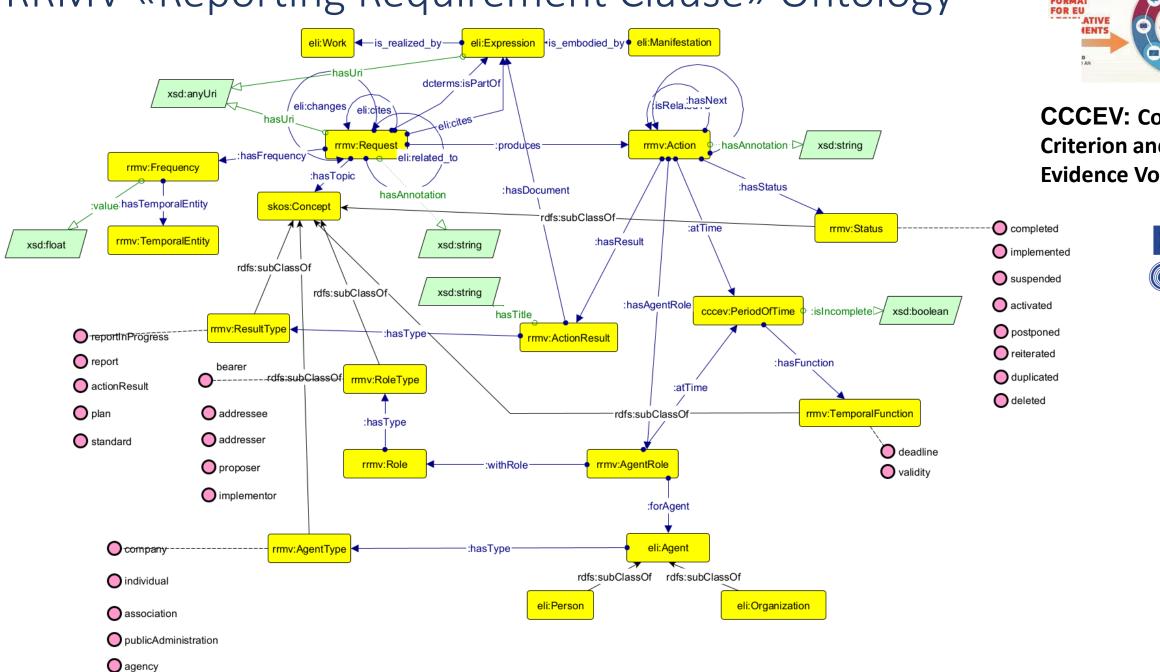
3. The Commission shall provide a report to the European Parliament and the Council by 20 January 2010 on the transparency of quarterly financial reporting and statements by the management of issuers to examine whether the information provided meets the objective of allowing investors to make an informed assessment of the financial position of the issuer. Such a report shall include an impact assessment on areas where the Commission considers proposing amendments to this Article.

http://data.europa.eu/eli/dir/2004/109/oj

**Agent** 

**Topic** 

#### RRMV «Reporting Requirement Clause» Ontology





**CCCEV**: Core **Criterion and Core Evidence Vocabulary** 



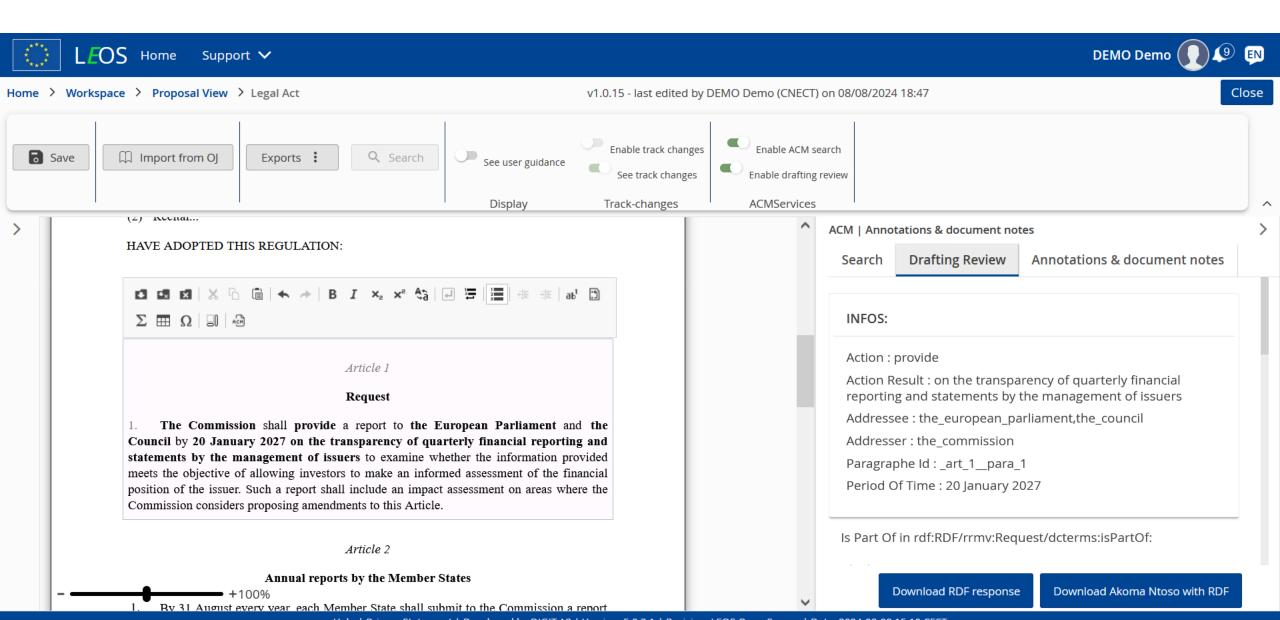
#### Reporting Requirement Clause Drafting

#### **LEOS**

3. The **Commission** shall provide a **report** to **EXTRACTION** the European Parliament and the Council by 20 January 2010 on the transparency of quarterly financial reporting and statements by the management of issuers to examine **VISUALIZATION** whether the information provided meets the objective of allowing investors to make an informed assessment of the financial position of the issuer. Such a report shall include an impact assessment on areas where the Commission **MAPPING** considers proposing amendments to this Article. **RRMV REPRESENTATION** 

#### **INTEGRATION**

#### Reporting Requirement Clause Drafting



## From Editing to Drafting – Preliminary conclusions

- LEOS is a flexible integration platform
- Hybrid AI is powerful
- Quality Legal Corpora for EU law are available
- Importance of designing an intuitive Human Computer Interface
- 'Integrate' semantics in AKN
- Pilot the use of Large Language Models

# ... And More and Beyond We will meet again

#### 'Complete' LEOS

- New types of documents
- Align with new versions of AKN4EU
- Open-source converter from AKN4EU to OpenXML and PDF
- ...

#### **Digital-Ready Policy making**

 Reporting requirements using structured data, link with the Commission's acquis management system, assessment of the digital dimension of legislation using structured data (digital requirements), generic implementation for any type of information

#### Study, Explore, Pilot and Deploy AI (to be decided)

- Study how to build trust in the use of AI, create synergies between AI and humans and document productivity gains
- Integrate a Legal Drafting Quality Score (LDQS) in LEOS
- Scale up the transposition of EU law
- Pilot the use of LLM to assist drafting, including auxiliary documents
- ..



#### Conclusions



Trust



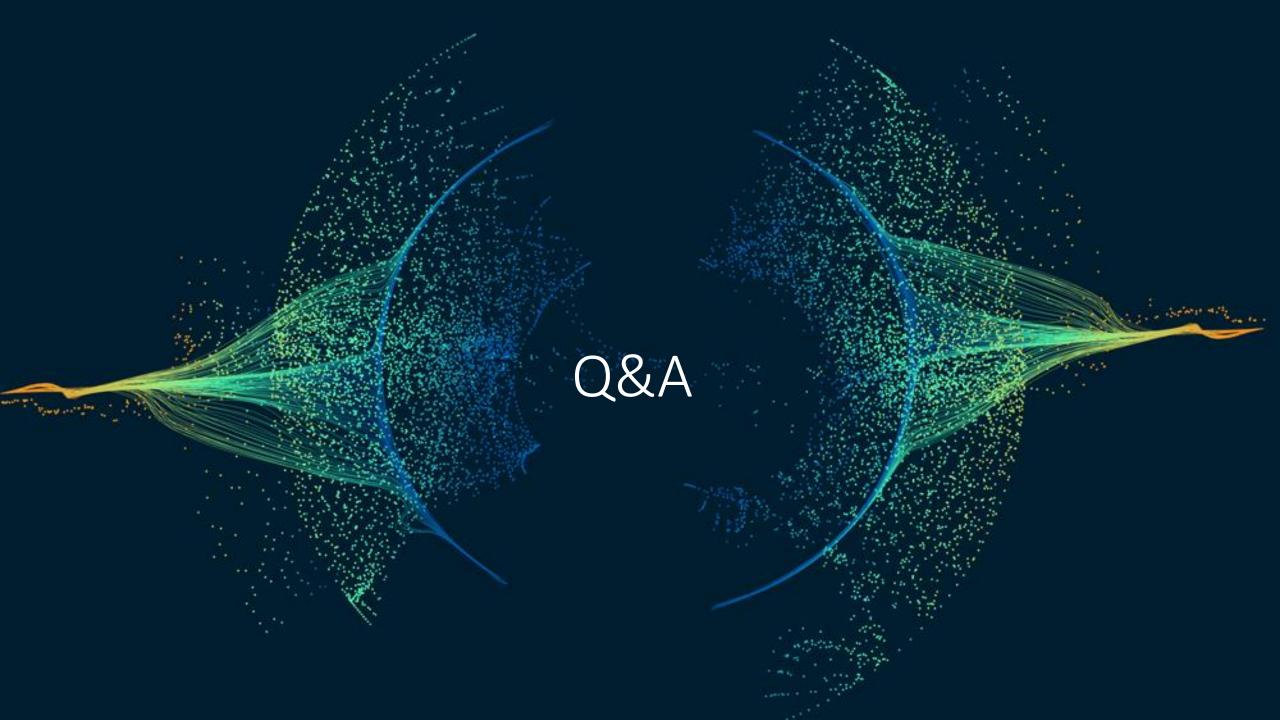
Scale



Readiness



Resources



#### More about LEOS



Last update: 08/06/2023

Our LEOS experience

https://joinup.ec.europa.eu/node/706589



Last update: 05/07/2022

Drafting legislation in the era of Al and digitisation

https://joinup.ec.europa.eu/node/705475



Last update: 12/05/2022

LEOS reuse story - user from Spain

https://joinup.ec.europa.eu/node/702471



Last update: 12/05/2022

LEOS reuse story - by Dr. Fotis Fitsilis

https://joinup.ec.europa.eu/node/705390







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