



19 April  
2024



joinup

# User Group Meeting

Project Officer:

**Bernard CLAES**

European Commission – DIGIT B2 Business Manager of Joinup

**interoperable**  
europe

innovation ∞ govtech ∞ community

# Management Level



**LEONTINA SANDU**  
Head of Unit  
&  
Project Owner



**BERNARD CLAES**  
Project Officer  
**Joinup**



Under contract with the European  
Commission



**PETRO DUDI**  
Project Manager

Project team  
Core team

Technical



SARA  
REGUERAS RIVAS



FLORIN  
LANGA



CLAUDIU  
CRISTEA



ZOLTAN  
HORVATH



ITALO  
MAIRO



ALEXANDRE JOSE  
MOTA DIAS



ILIAS  
DIMOPOULOS



DIOGO  
VARGAS



ADRIAN  
LORENC



ZOLTAN  
HORVATH



PAULO  
GINGAO



HERVE  
DONNER

Functional



JOHAN  
CLEMENTE



FILIP  
GAMAN



COSTANZA  
BERSANI



KONSTANTINOS  
SPYRIDIS



VASILIKI  
CHATZIMICHAIL



DAVIDE  
CREMONESINI



MARTA PUENTE  
CARMONA



KHADIDIATOU  
DIAW



STEPHANOS  
ECONOMIDES



MARIA  
ALEXANDRI



PATRICE-  
EMMANUEL  
SCHMITZ



SOPHIE HERAIL

# Objectives of the meeting



**Present the latest highlights**



**Discover Joinup's content**



**Interact with you**



**Discuss the future of Joinup**

# Agenda

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- **Highlights for users**
- Highlights for content creators
- Interesting content
- Coming soon
- Interactive session
- AOB

# User Group Meeting

# Highlights for users

## Solutions Hub

The screenshot shows the 'Solutions Hub' website. At the top is a dark blue navigation bar with the 'joinup' logo on the left and links for 'Interoperable Europe', 'Solutions', 'Support Centre', 'Sign in', and 'Get started' on the right. Below the navigation bar, the page title 'Solutions' is displayed, followed by a brief description: 'Solutions help you create European digital services. Solutions includes software, services, core vocabularies, architecture, frameworks, guidelines, licence, specifications and standards.' To the right of the title are buttons for 'Like (1)' and 'Translate'. The main content area is titled 'Browse by Solution type' and features two cards. The first card, 'Software Solutions', has an orange and black abstract background and describes 'Stand-alone software, software components and services designed to build European digital services.' The second card, 'Other solutions', has a brown and black abstract background and describes 'Core vocabularies, architecture, frameworks, OSS licence, specifications, standards and e-learning.' At the bottom of the page, there is a section titled 'Find any solution by most popular topic' with the instruction 'Filter our solutions based on their relevance to a given domain.' Below this are several blue buttons representing different domains: 'ICT', 'Digital government', 'Innovation', 'Health', 'Energy and environment', 'Transport', 'Economics', and 'Human resources'.

### Benefits

- Discover solutions by **types**

### What's coming (Q1/2025)

- The open-source software shared by member states
- The Interoperable Europe **recommended** solutions

# Highlights for users

## Unified Overview page for Collections/Solutions

### Previous 'About' Page

### New 'Overview' Page

### Previous 'Overview' Page

EIRA is a reference architecture to implement interoperable European digital services. It is based on ArchiMate for modelling. It includes ABBs, views, viewpoints and a Data Space perspective. It is an EC solution.

**Owner**  
European Commission (DG Informatics) - ISA² Programme  
Supra-national authority

**Contact information**  
DIGIT-EIRA@ec.europa.eu  
Please confirm your contact information to enable users to contact you.

**About the European Interoperability Reference Architecture**  
The European Interoperability Reference Architecture (EIRA®) is an architecture content metamodel defining the most salient architectural building blocks (ABBs) needed to build interoperable e-government systems. The EIRA® provides a common terminology that can be used by people working for public administrations in various architecture and system development tasks. The EIRA® was created in the context of Action 2016.32 of the ISA² Programme and is being maintained under the Digital Europe...

### Benefits

- Consistent user experience
- Priority to key information
- New abstract text to pitch your project

## Navigation improvements – Bookmark content

The screenshot shows the top navigation bar of the Interoperable Europe website. The 'Bookmark' icon in the navigation bar is circled in red. Below the navigation bar, the 'Bookmark' button is also circled in red. The page content includes a search bar, a 'Like (5)' button, and a 'Translate' button. The main content area features a 'Bookmarks' section with a filter bar showing 1 Collection, 1 Custom page, 1 Discussion, 1 Event, 1 News, and 1 Solution. Below the filter bar, there are three bookmarked items: a webinar titled 'Core Vocabularies' on Friday, 09 April 2024, and two items with the word 'ENDORSE' in large orange letters.

### The Bookmark feature

- Save your favourite content for easy further access

### The Bookmarks page

- Your Bookmarks page lists the bookmarked content and lets you filter it by content type



# Agenda

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- Highlights for users
- **Highlights for content creators**
- Interesting content
- Coming soon
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# User Group Meeting

# Highlights for content creators

## Archiving Solutions

### The key to preserving relevant content

The screenshot shows the 'engage' solution page on the joinup platform. The page header includes the European Commission logo and navigation links like 'Interoperable Europe', 'Solutions', 'Support Centre', 'Sign in', and 'Get started'. The solution title 'engage' is followed by 'eParticipation and eVoting', '0 members', and an 'Archived' status indicator (highlighted with a red box). Below the title, there are 'Like (0)' and 'Translate' buttons. The main content area describes 'engage' as an eParticipation toolkit developed under the Parterre Project, funded by the European Commission. It also lists the owner as 'Unknown' and contact information as 'cleland-b2@email.ulster.ac.uk'. A 'Quick links' section contains a 'Release history' link. At the bottom of the page, there is a 'Show archived' toggle switch (highlighted with a red box).

### Benefits

- The whole Solution is archived
- The solution is still accessible
- Provide better results in the search.

### How it works

- Edit the solution and click on the button "Archive"
- Only Moderators can archive a Solution for now

## Gallery of images

### Add galleries of images

The screenshot displays the Joinup platform interface. At the top, there is a header with the European Commission logo and the 'joinup' logo. Below the header, there is a navigation bar with 'Interoperable Europe' and 'Solutions' tabs. The main content area shows a custom page titled 'New Custom page1' with a sub-section 'Image Gallery 1'. The gallery contains three images: a network of blue nodes and lines, a glowing blue sphere, and a network of blue nodes and lines. A 'Like (0)' button and a 'Translate' button are visible next to the gallery. A 'Choose a component' dialog box is open, showing a list of components including 'Image gallery', 'Image', 'Map', 'Poll', 'Quote', 'Social media', 'Testimony', 'Tiles', 'Text', 'Video', and 'Webform'. The 'Image gallery' component is selected.

### Benefits

- Show multiple images
- View each image in full scale
- Batch upload images to the gallery

### Where to find it

- Available as a Layout Editor component for Custom Pages

# Agenda

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## User Group Meeting

# Interoperability Test Bed (ITB)



**Costas Simatos**

Solution Architect – Interoperability Test Bed Team Leader

# Interoperability Test Bed (1/3)

**ITB**

Interoperability  
Test Bed

An online, intuitive and  
self-service platform for  
conformance testing of IT  
systems against semantic and  
technical specifications



Powered by  
DIGIT B2



Standards based  
(GITB CWA)

# Interoperability Test Bed (2/3)



## VALIDATORS

Used for data validation

XML, RDF, JSON and CSV support

Anonymous and stateless

Multiple APIs and report outputs

Configuration-driven



## CONFORMANCE TEST BED

Used for conformance testing

Account-based access

Scenario-based test cases

Rich monitoring and reporting

Extensible capabilities

# Interoperability Test Bed (3/3)



## USE AS A DIGIT SERVICE

Use as services

Shared cloud-based instances  
Hosted and operated by DIGIT  
User-managed configuration  
Distinct setup per project



## INSTALL ON-PREMISE

Use as components

Public Docker images  
Hosted and operated by users  
Allows internal integrations  
Allows access restrictions



# European Public Licence (EUPL)



**Patrice-Emmanuel Schmitz**

Joinup Legal Expert

# EUPL is focused on OPEN LICENSING (not “only” on the EUPL)

- Fighting to strengthen sovereignty, trust principles and the rule of law, EU puts together regulation pieces.
- The role of **digital commons** is crucial. Their “OPEN” character results from the licence.
- No regulation will **impose** a specific F/OSS licence, but the EUPL is proposed as a tool for interoperability and good governance, for public & private digital commons.

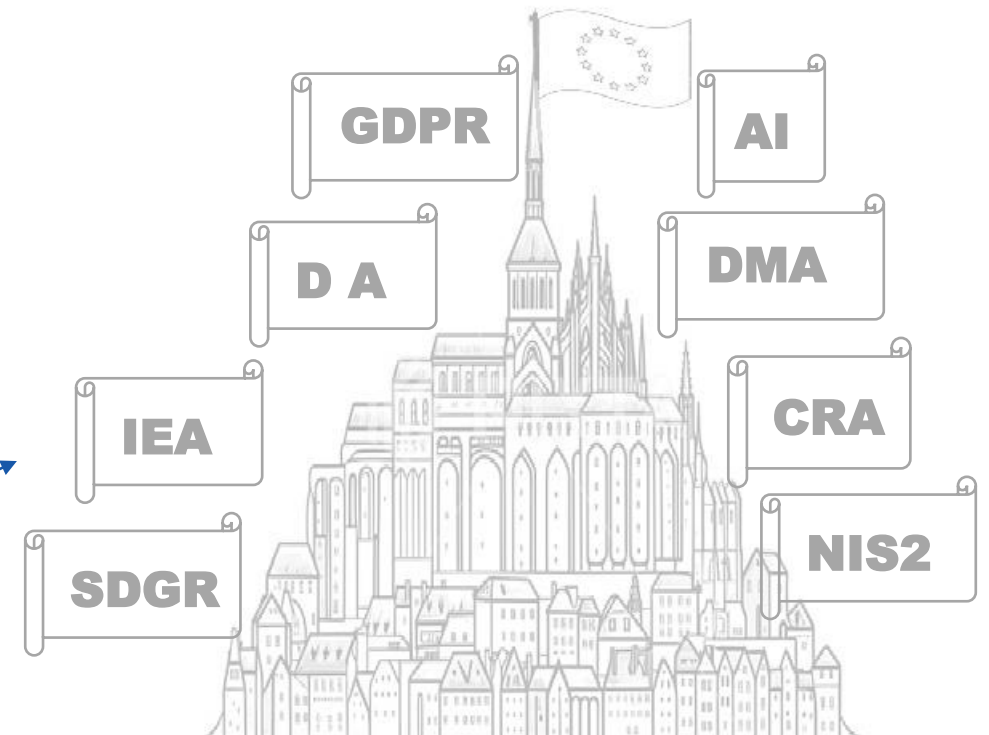
Commission Decision C(2021) 8759:

*The open source licence granted by the Commission shall be the EUPL*

IEA - Interoperable Europe Act (8.3):

*Where public sector portals collect open source solutions, they shall allow for the use of the EUPL*

## EU DIGITAL SOVEREIGNTY REGULATION CATHEDRAL



## DIGITAL ECOSYSTEM BAZAAR

# EUPL explores the European Union Public Licence



- Working value in 23 languages
- Covering all forms of “distributions” (including remote/SaaS)
- Inclusive (scope covers “the Work”)
- Providing open rights/freedoms (certified by both OSI and FSF)
- EU law is applicable (Member State of licensor)
- Realistic liability exclusion (+ inclusion of a guarantee of origin - CDO)
- Distributed derivatives **must stay open** (“copyleft” clause)
- But...
  - Interoperable: freedom of linking, no “virality”
  - Compatible with other copyleft licences (GPL/AGPL LGPL MPL EPL etc.): combined derivatives could be re-licensed. The compatible licence prevails only in case of conflict (but sharing and reciprocity remain)

EUPL provides [guidelines](#), [FAQs](#), [news](#), [discussions](#)... and even some [philosophy](#).

# Other EUPL solutions and links



## JLA


- Find “your” license
- Read the full text
- Compare licenses
- Check compatibility

## Contact form

- Obtain legal opinion

## Connections with

- The SPDX project
- Other relevant Joinup spaces: OSOR, BLSI



### Joinup Licensing Assistant

[Subscribe to this solution](#)

Find and compare software licenses

Can	Must	Cannot	Compatible	Law	Support
Use/reproduce	Incl. Copyright	Hold liable	None N/A	EU/MS law	Strong Community
Distribute	Royalty free	Use trademark	Permissive	US law	Governments/EU
Modify/merge	State changes	Commerce	GPL	Licensor's law	OSI approved
Sublicense	Disclose source	Modify	Other copyleft	Other law	FSF Free/Libre
Commercial use	Copyleft/Share a.	Ethical clauses	Linking freedom	Not fixed/local	
Use patents	Lesser copyleft	Pub sector only	Multilingual	Venue fixed	
Place warranty	SaaS/network	Sublicense	For data and metadata		
	Include licence		For software		
	Rename modifs.				

or enter licence SPDX ID:

[Reset](#)

# Big Data Test Infrastructure (BDTI)



**Maria Claudia Bodino**

Team Leader – Digital Innovation Policy

DIGIT.DDG.B.1.001 - Data, AI and Innovation Policy

# What is the Big Data Test Infrastructure (BDTI)?



Not only for big data, for public sector in general (no personal data)



To help the public sector **to derive insights from data** and accelerate transition towards **data-informed decision making**.

# Who is the Big Data Test Infrastructure (BDTI) for?



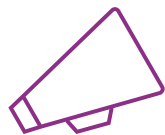
## European Public Administrations

All European Public Administrations at **local, regional and national level** can independently apply for a BDTI pilot project



## Ecosystem with **academia** and **private sector**

Academia, spin-off, startups can apply for pilot projects as long as there is a **clear collaboration** with a Public Administration which will be the main point of contact for the project (Master/PhD, GovTech startups)



**We need YOUR support in promoting BDTI between your public administrations**

Contact us:

[EC-BDTI-PILOTS@ec.europa.eu](mailto:EC-BDTI-PILOTS@ec.europa.eu)



# Why use the BDTI ?



**Benefit of six months free of charge** service, including **advisory and technical** support for the duration of the pilot



**Experiment with data analytics** using high **performance infrastructure** that leverages the power of the **elastic cloud**



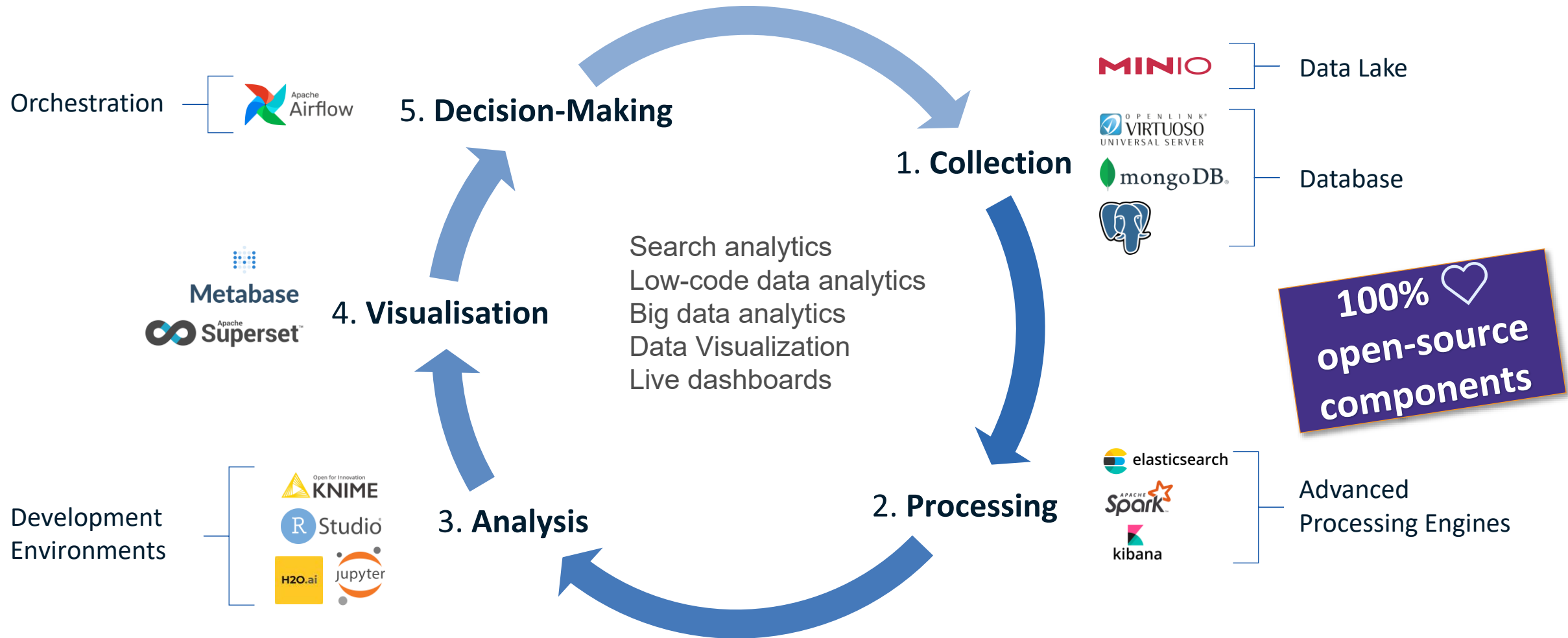
**Receive guidance** to move from a pilot to a **production-ready** process – **EXIT package**



**Test your idea → Extract value → Create knowledge**



# With its open-source tools, BDTI supports you throughout your data journey



# How to apply



Get familiar with the [BDTI service on our website](#)



Brainstorm your data analytics project using our [BDTI Canva](#) and then fill in the [BDTI template request form](#)



Submit your pilot request (template) by email: [EC-BDTI-PILOTS@ec.europa.eu](mailto:EC-BDTI-PILOTS@ec.europa.eu)



Meet with us to elaborate on your use case



Pilot Project is approved if:

- Brings value
- Can be completed in 6 months
- Resources are available (skills, team, data)



Your test environment is set up



You can start piloting and create value!

# Who used it already?



## CONSELLERIA DE SANITAT (CS) - Text Mining

Conselleria de Sanitat, the Health Public Administration of the Comunidad Valenciana Regional Government, needed a tool capable of analysing and extracting knowledge from the huge quantity of scientific clinical articles coming from different sources (i.e. PubMed.gov, Covid-19 related clinical articles).



Advanced **data visualisation** and **text mining** tools to help **extract knowledge contained in the documents**, supporting clinicians and managers in their clinical practices and day-to-day work.

## EU CONVALESCENT PLASMA DATABASE – Data sharing

The European Blood Alliance is working together with the European Commission (DG SANTE) to create and manage an **EU-wide open-access platform** that collects data to support a study on **Covid-19 convalescent plasma therapy**. The aim of the study is to assess in which conditions the convalescent plasma treatment is most effective, in order to take data-driven decisions on the therapy and focus the efforts of the research in the most promising directions.



A ready-to-use, virtual environment in which **data collected through a custom-built website** is ingested and anonymised, to be then analysed with advanced data visualisation and analytical tools. Initially, only donation data was processed, then the scope was increased to capture the **end-to-end of blood plasma, from donation to patient/clinical trial**.

## CITY OF FLORENCE – Mobility data

The main goal of the Municipality is to perform a **cross correlation between the multiple datasets** available within the city to understand how people were and are moving between the different districts, to then derive precious insights about mobility and about **how services can be redesigned to foster cultural activities and events**.



Predictive, descriptive and time-series analysis on multiple datasets collected **before, during and after the Covid-19 pandemic** such as: public Wi-Fi sensors, parking and geo-referenced data of people movements (i.e. tourists).




# Who used it already?

## Semantic Knowledge Graphs for Distributed Data Spaces



### The Public Procurement Pilot Experience

## Semantic Knowledge Graphs for Distributed Data Spaces: The Public Procurement Pilot Experience

Cecile Guasch<sup>1</sup> , Giorgia Lodi<sup>2</sup> , and Sander Van Dooren<sup>1</sup> 

<sup>1</sup> European Commission, DG DIGIT, Brussels, Belgium  
{cecile.guasch,Sander.VAN-DOOREN}@ext.ec.europa.eu

<sup>2</sup> Institute of Cognitive Sciences and Technologies of the Italian National Research Council (ISTC-CNR), Rome, Italy  
giorgia.lodi@cnr.it

**Abstract.** This paper presents the experience gained in the context of a European pilot project funded by the ISA2 programme. It aims at constructing a semantic knowledge graph that establishes a distributed data space for public procurement. We describe the results obtained, the follow up actions and the main lessons learnt from the construction of the knowledge graph. This latter requires to support different data governance scenarios: some partners control, with their own tools, the building process of their portion of the knowledge graph. Other partners participate in the pilot by providing only their open CSV/XML/JSON datasets, in which case transformations are required. These are performed on the infrastructure made available by the European Big Data Test Infrastructure (BDTI). The paper introduces the design and implementation of the knowledge graph construction process within such a BDTI infrastructure. By instantiating an OWL ontology created for this purpose, we are able to provide a declarative description of the whole workflow required to transform input data into RDF output data, which form the knowledge graph. The declarative description is therefore used to provide instructions to a workflow engine we use (Apache Airflow) for knowledge graph construction purposes.

Guasch, C., Lodi, G., & Dooren, S. V. (2022, October). Semantic Knowledge Graphs for Distributed Data Spaces: The Public Procurement Pilot Experience. In *The Semantic Web—ISWC 2022: 21st International Semantic Web Conference, Virtual Event, October 23–27, 2022, Proceedings* (pp. 753-769). Cham: Springer International Publishing. <https://iswc2022.semanticweb.org/index.php/accepted-papers/>

# BDTI Essential course: Become familiar with the BDTI open-source data analytics tools

<https://code.europa.eu/bdti/bdti-essentials-course>



Access the data from multiple sources

Merge the data and store it in the desired format (end of ETL process)

**SESSION 1:**  
Data Access and Exploration

**SESSION 2:**  
Data Cleaning and Transformation

**SESSION 3:**  
Data Blending and Storage

**SESSION 4:**  
Analytics: aggregation, visualisation, reporting

**SESSION 5:**  
Gathering data from the Web and Geo Viz

EU Open data portal:

[data.europa.eu](https://data.europa.eu)

Formats:

csv, Excel, JSON

Tools:



Clean and transform the data to the correct shape

Make sense of data, extract insights and visualise them in a report

Enhance analytics by gathering data from the internet



# Get in touch and follow the BDTI activities



Are you collaborating with a public administration?  
Do you want to have 1:1 call?



EC-BDTI-PILOTS@ec.europa.eu



Visit BDTI's  
website



Subscribe to BDTI's  
newsletter



Subscribe to BDTI's  
Joinup

<https://big-data-test-infrastructure.ec.europa.eu/>

# LEOS - Open Source software for editing legislation



**Alice Vasilescu**

LEOS Community Manager, external consultant European  
Commission

# What is LEOS?

## Mission

### **"Make legislation drafting more efficient"**

LEOS is designed to help those involved in drafting legislation, which is usually part of a complex process, by facilitating **efficient online collaboration**.

### **"Focus on the content not on the structure"**

LEOS helps the drafters follow the rules and avoid mistakes.

## Our journey

Our journey started under **ISA Programme** as **LEOS**.

Continued under **ISA<sup>2</sup> Programme** as **LegIT-2016.38 Legislation Interoperability Tools** from Q2/2016 until Q3/2021.

Moved to the new **Digital Europe Programme (DIGITAL)** as of 2021.

## What we offer

- We deliver open source software that is inline with our mission and which is available for free under [European Union Public Licence](#).
- We foster the uptake of the solution, by providing supporting services to users e.g. training service, workshops etc.
- Last but not least, we support the growth of the open source community built around LEOS.



# Challenges in drafting of legislation



The process is complex and involves both digital and paper versions of documents



Many stakeholders collaborate via various tools



Wrong application of legislative drafting rules and styles



Deal with different versions of documents



Different tools used by institutions with need for



conversions  
Limited tools for re-use of texts



# Legislation Editing Open Software

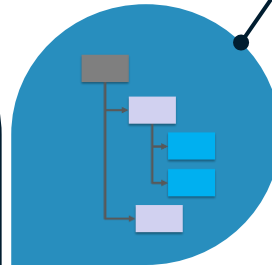
## Collaboration

- facilitating efficient online collaboration



## Structure

- helps the drafters follow the structure rules and avoid mistakes



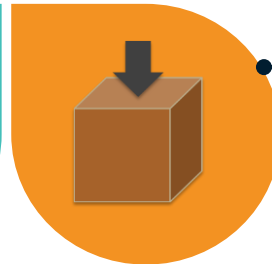
## Versioning

- keeping all versions in one central place

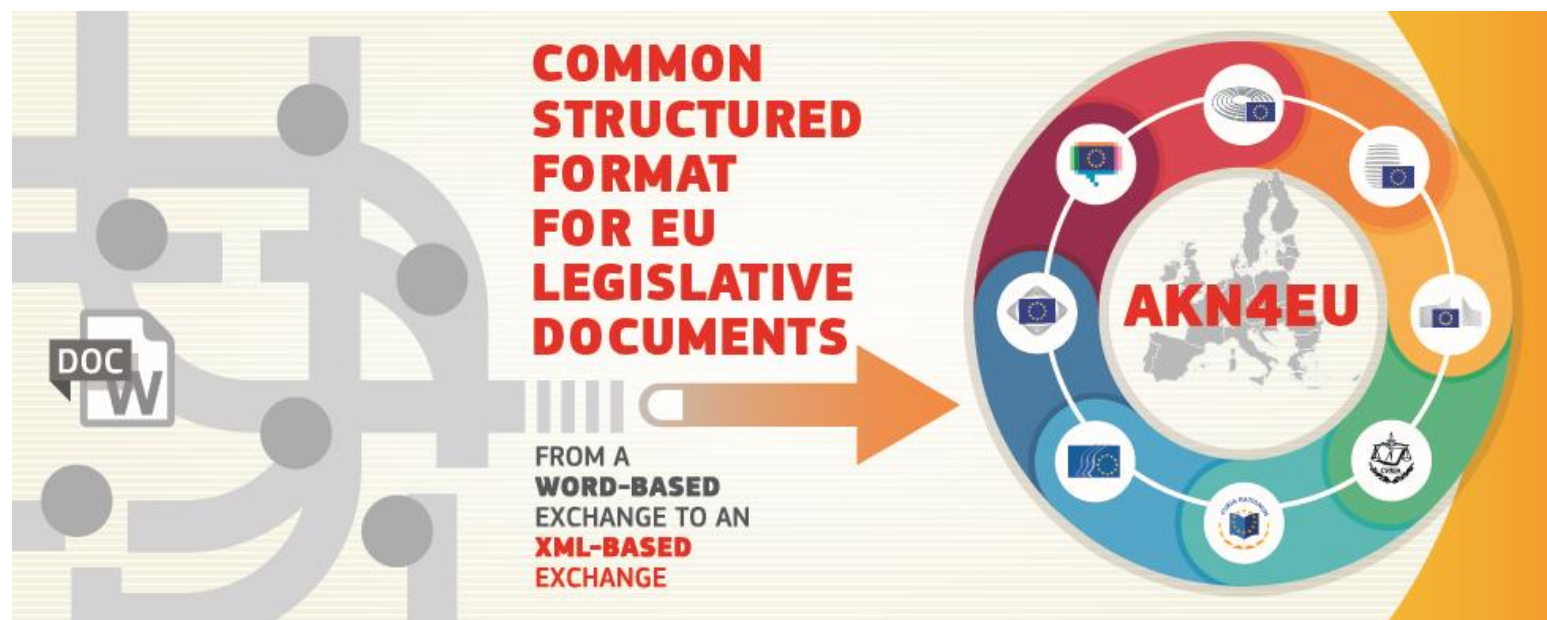


## Import

- reuse text from existing sources e.g. Official Journal of the European Union



## Standard for structured Legal documents

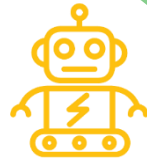


<https://op.europa.eu/en/web/eu-vocabularies/akn4eu>

# Why LEOS?



The political imperative to **digitally transform** the legislative process to **improve efficiency, quality** and e.g. **transparency**



The necessity and desire to embrace **proven innovative technologies**



The requirement to put **technology at the service** of the **user**



Necessity and desire for **autonomy** and **vendor independence**.

Governance

code.europa.eu



LEOS team

LEOS Community

# Agenda

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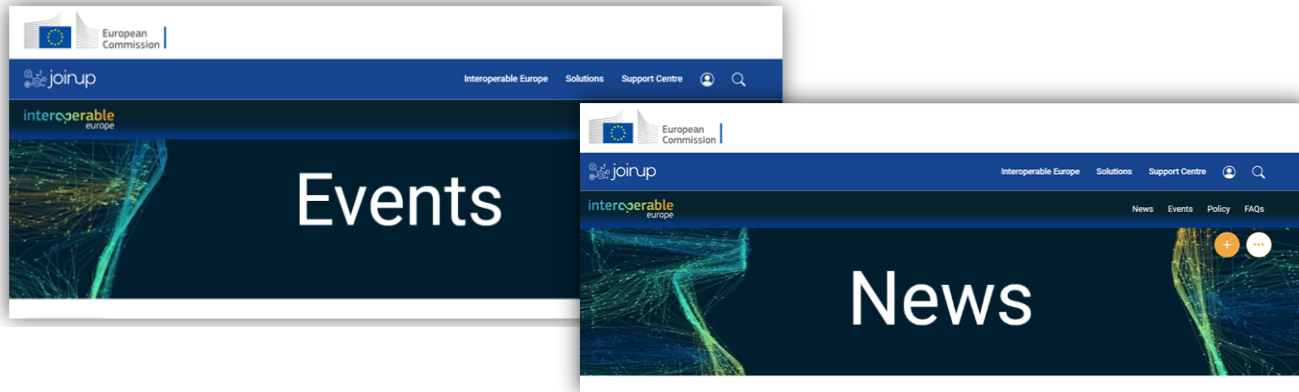
- Highlights for users
- Highlights for content creators
- Interesting content
- **Coming soon**
- Interactive session
- AOB

# User Group Meeting

Coming soon

## New features in content creation

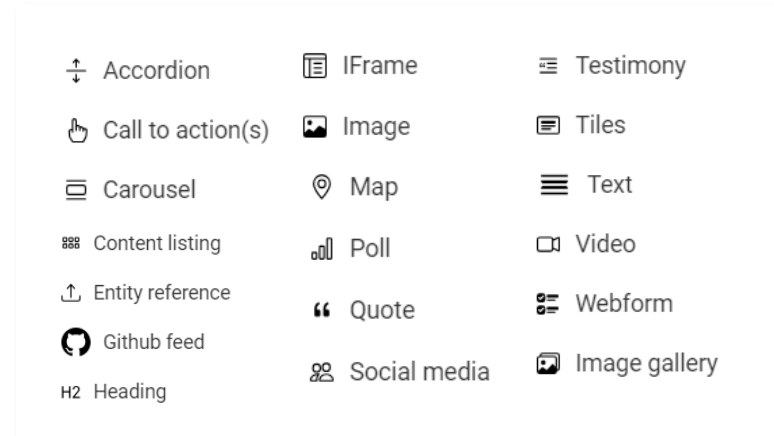
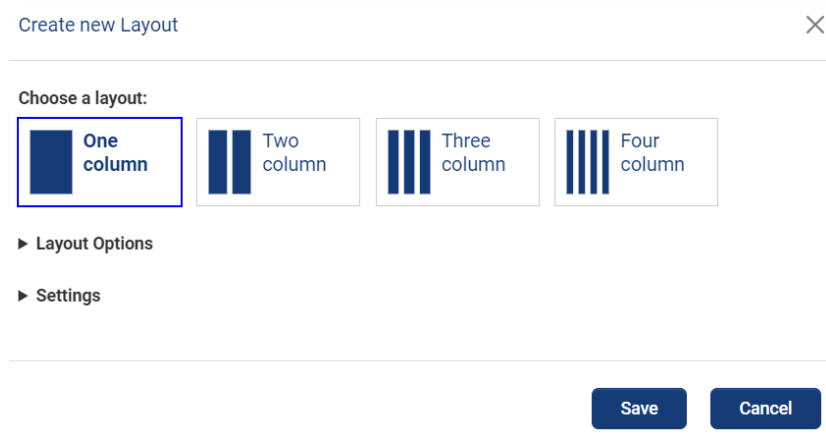
The Layout Editor will be accessible in News, Events and Documents!



### The benefits

- Intuitive content creation
- Enhanced user experience
- Optimised for mobile devices

### The possibilities



Coming soon

# Supporting the Interoperable Europe Act

The **Interoperable Europe Act** has entered into force and Joinup will progressively become the **Interoperable Europe Portal**.



#### Governance Board

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas varius tortor



#### Assessment page

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas varius tortor



#### Community of Experts

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas varius tortor

The platform will support the **main pillars of the Act:**

- Governance Board
- Interoperability Assessments
- Interoperable Europe Community
- Solutions / trainings; etc.



# Agenda

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- Highlights for users
- Highlights for content creators
- Interesting content
- Coming soon
- **Interactive session**
- AOB

# User Group Meeting

# We would like to hear from you!

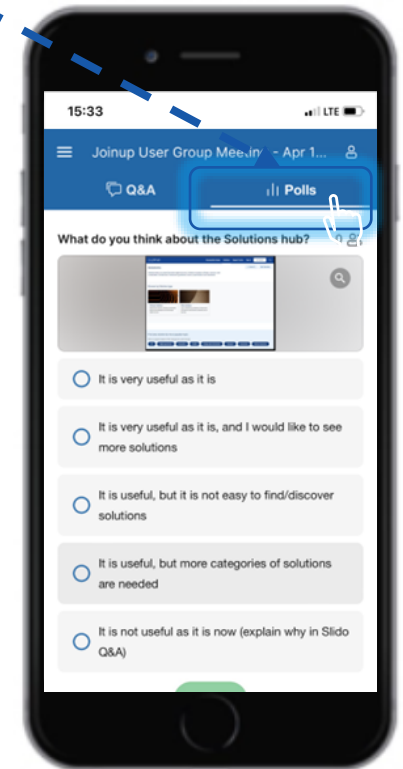
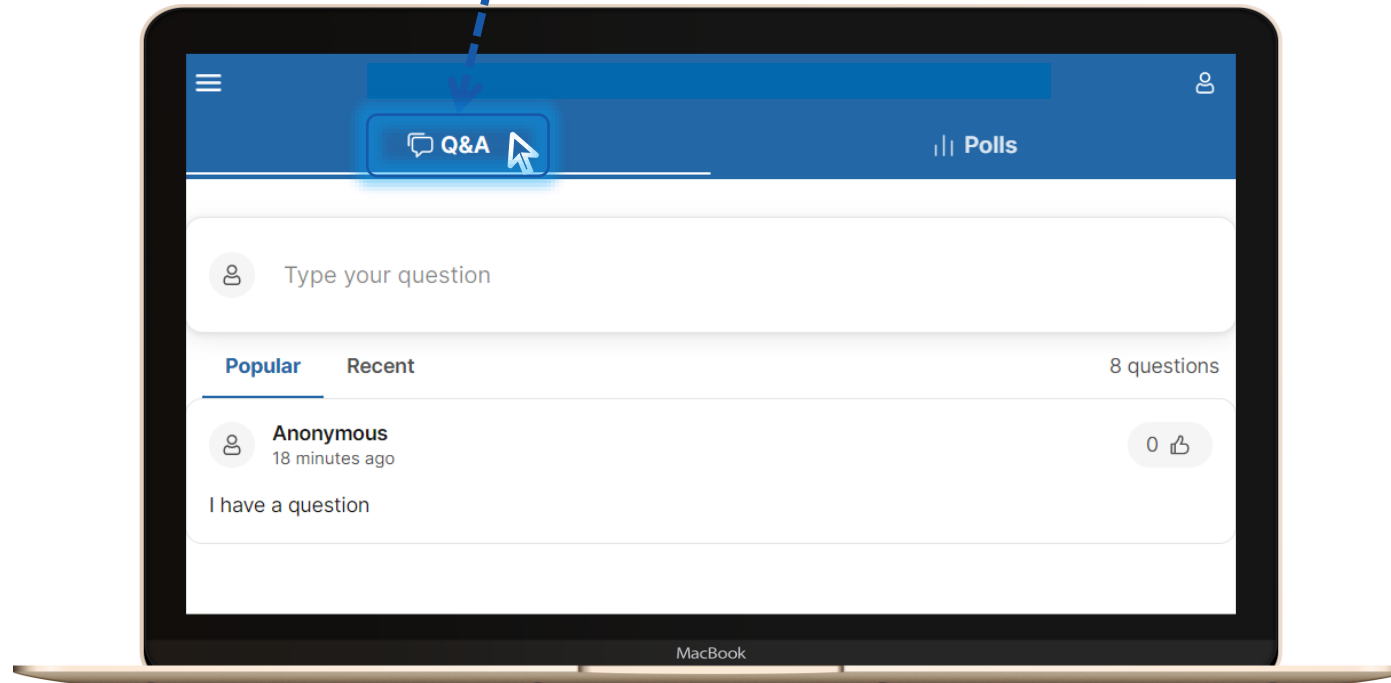
Join at **slido.com**  
and enter the code  
**#JoinupUGM**

Use this QR code:



Click here and add  
your questions!

Go here to answer the  
survey questions!



# slido



## You are from

 Start presenting to display the poll results on this slide.

slido



**What do you think about the Solutions hub?**

ⓘ Start presenting to display the poll results on this slide.

slido



**How do you find the unified Overview page for collections and solutions?**

ⓘ Start presenting to display the poll results on this slide.

**slido**



**What would you like to see on Joinup (i.e., features, content, etc.)?**

**i** Start presenting to display the poll results on this slide.

slido



**What would you like to see in the next User Group Meeting?**

ⓘ Start presenting to display the poll results on this slide.

# Agenda

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- Highlights for users
- Highlights for content creators
- Interesting content
- Coming soon
- Interactive session
- **AOB**

## User Group Meeting





# joinup



[@Joinup\\_eu](https://twitter.com/Joinup_eu)



[Joinup Community](#)



[Contact us](#)



[joinup.ec.europa.eu](http://joinup.ec.europa.eu)

Thank you!  
Any questions?

**interoperable**  
europe  
innovation ∞ govtech ∞ community

# Annex I – Joinup Statistics

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# Key Figures\* and Interesting Trends (1/3)

## Page views per year<sup>1</sup>

1.123.393

▲ +14%

## Visitors per year<sup>1</sup>

412.106

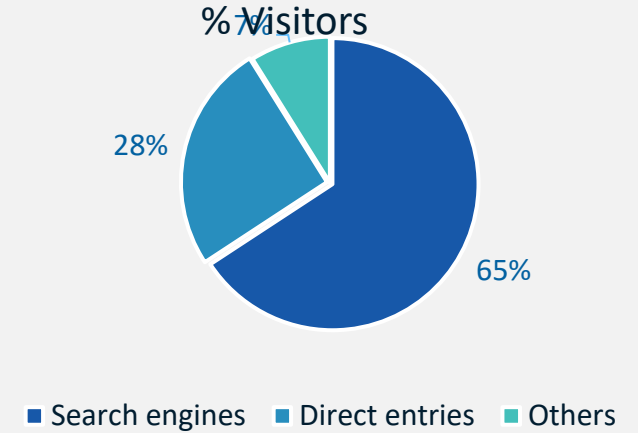
▲ +18%

## Top 5 European countries in 2024

Per number of visitors



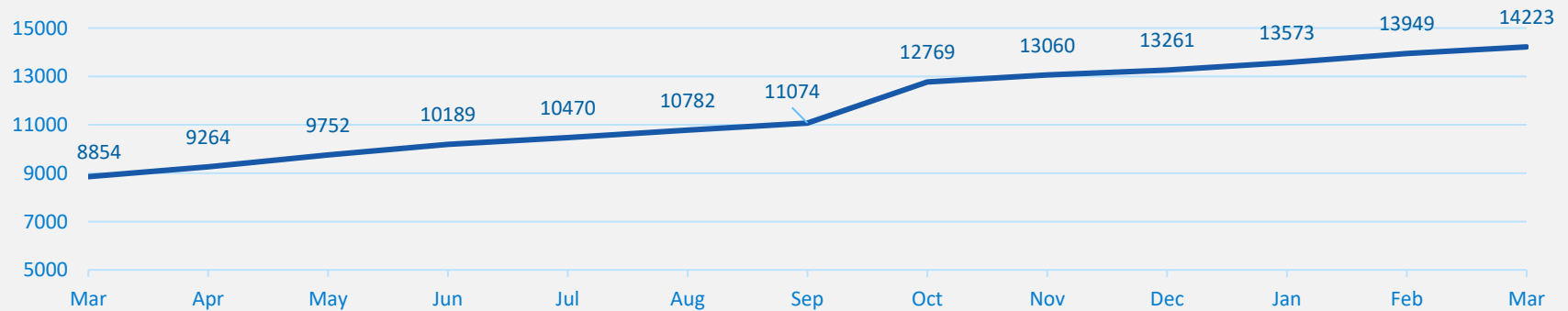
## Source of Joinup Traffic 2024



## New Users<sup>2</sup>

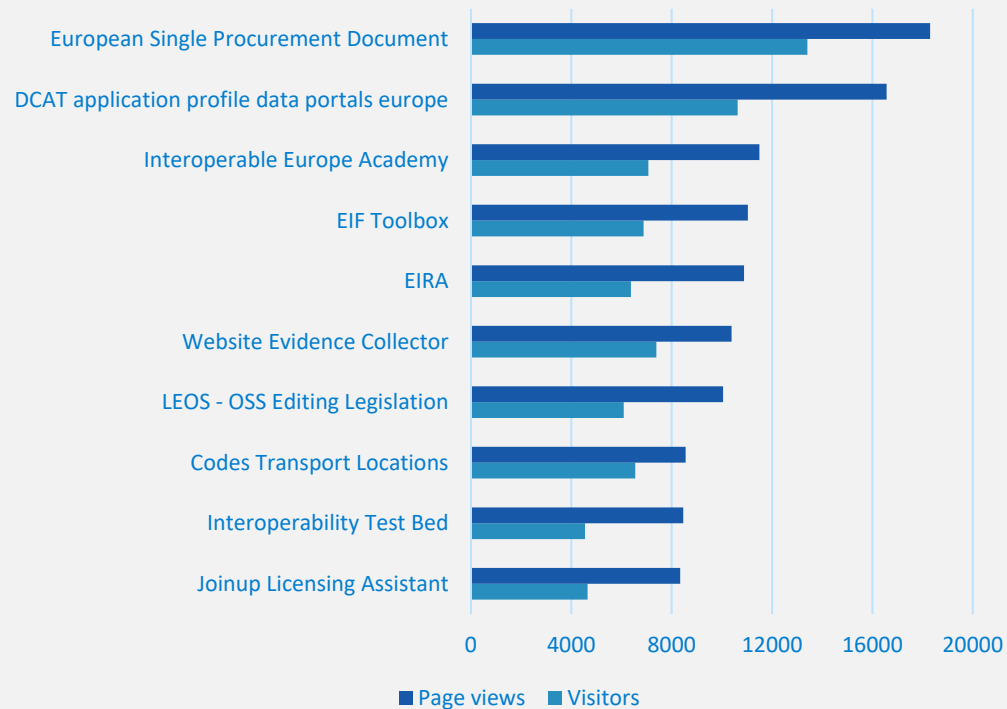
(Mar 2023 – Mar 2024)

Average increase:  
4% per month



# Key Figures\* and Interesting Trends (2/3)

## Top Solutions Per page views (March 23-24)



## Top Collections Per page views (March 23-24)

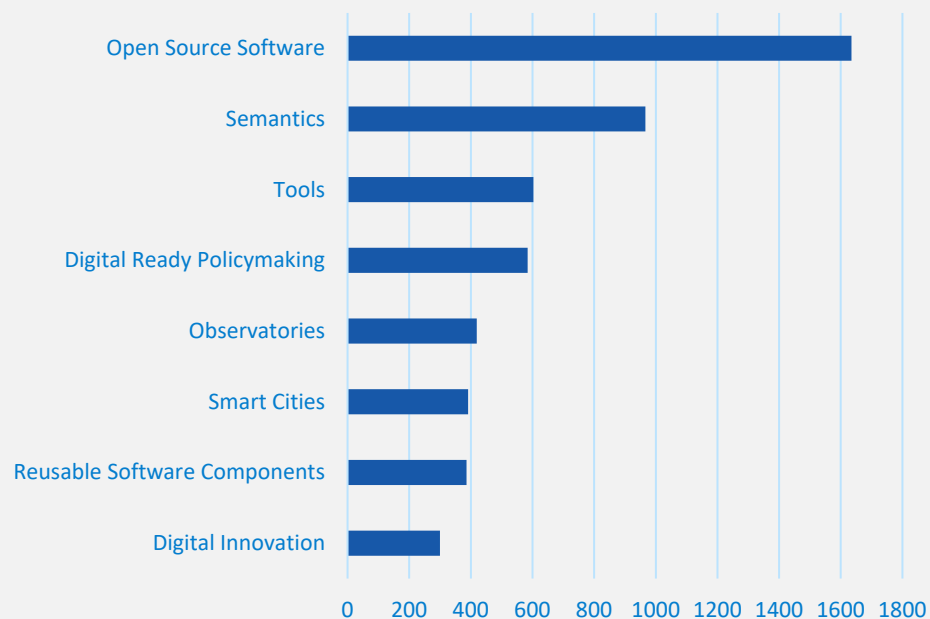


# Key Figures\* and Interesting Trends (3/3)

## Topics popularity

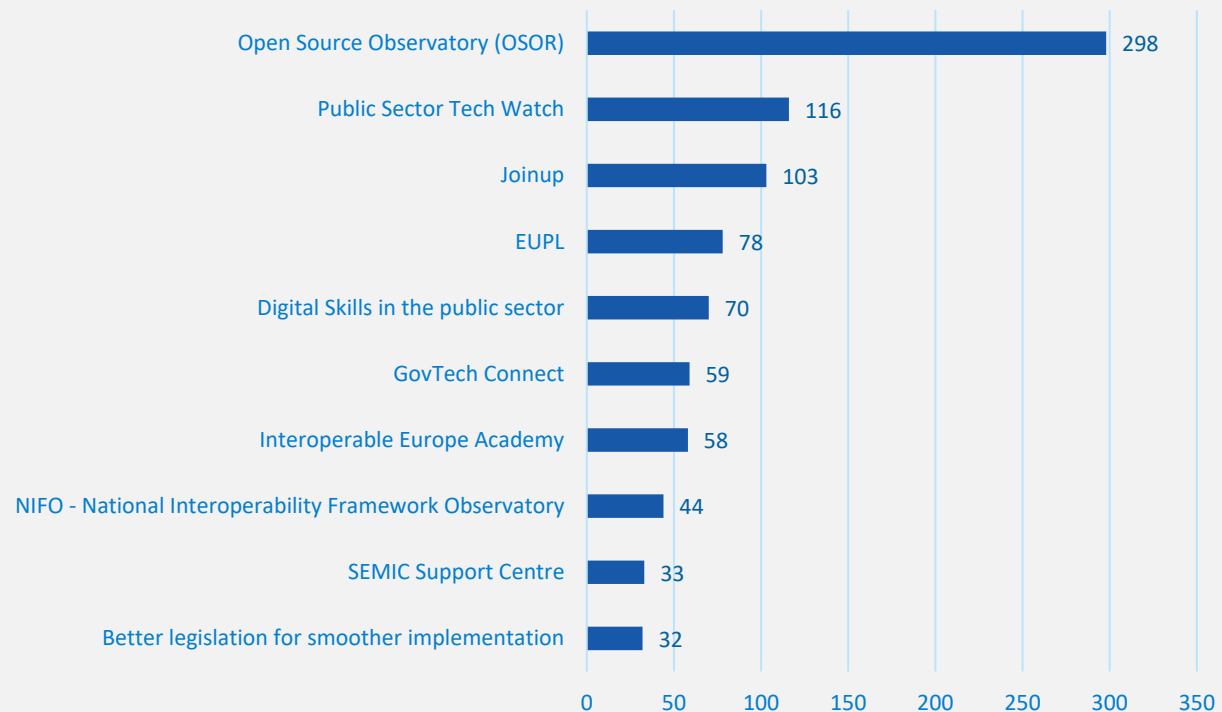
Per page views (Mar 23-24)

Page views



## Liked content

Per clicked Likes (Mar 24)



# Annex II – LEOS backup slides

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# More about LEOS



*Open source journey*

📅 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 AI and digitisation**

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



📅 Last update: 12/05/2022

**LEOS reuse story - user from Spain**

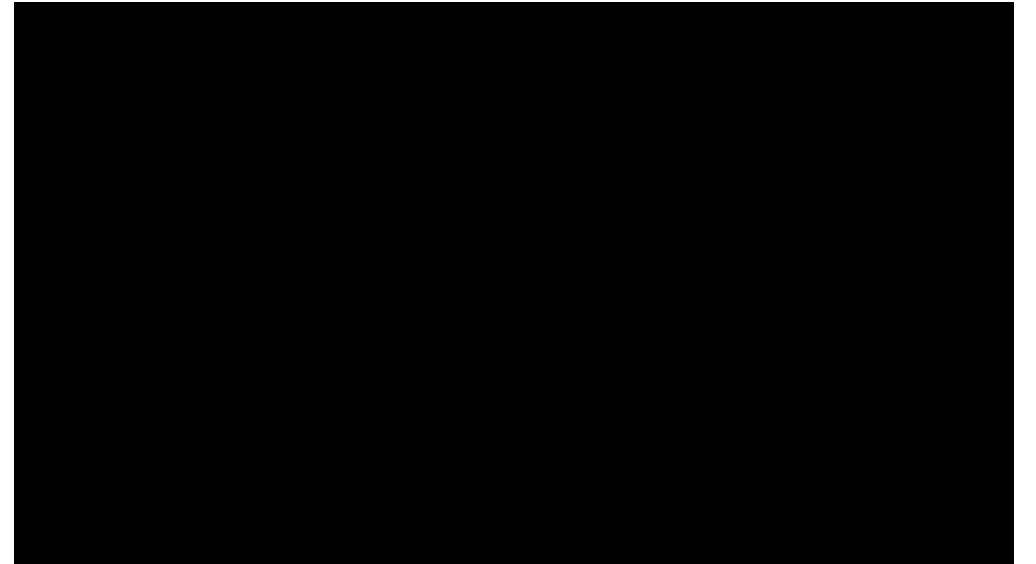
<https://joinup.ec.europa.eu/node/702471>



📅 Last update: 12/05/2022

**LEOS reuse story - by Dr. Fotis Fitsilis**

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





# Legislation Editing Open Software

Synergies [code.europa.eu](https://code.europa.eu) and  
Joinup



# LEOS on Joinup



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## LEOS - Open Source software for editing legislation

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Justice, Law and Security 97 members

Topics: Legal Open Source Software

Overview Discover LEOS LEOS community LEOS newsletter Discussions See more



Like (8) Translate

LEOS is a web tool to support the legislative drafting in the EU with online collaboration, version control, and co-editing. It utilises Akoma Ntoso XML schema. It is an EC solution.

Owner  
European Commission

Contact information  
[LEOS Team](#)

### Quick links

- EIF Perspective
- Release history

# Code.europa.eu

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~55

Direct members

Number includes our team.  
We differentiate between individual contributors (9 members) and project contributors.

6

Groups

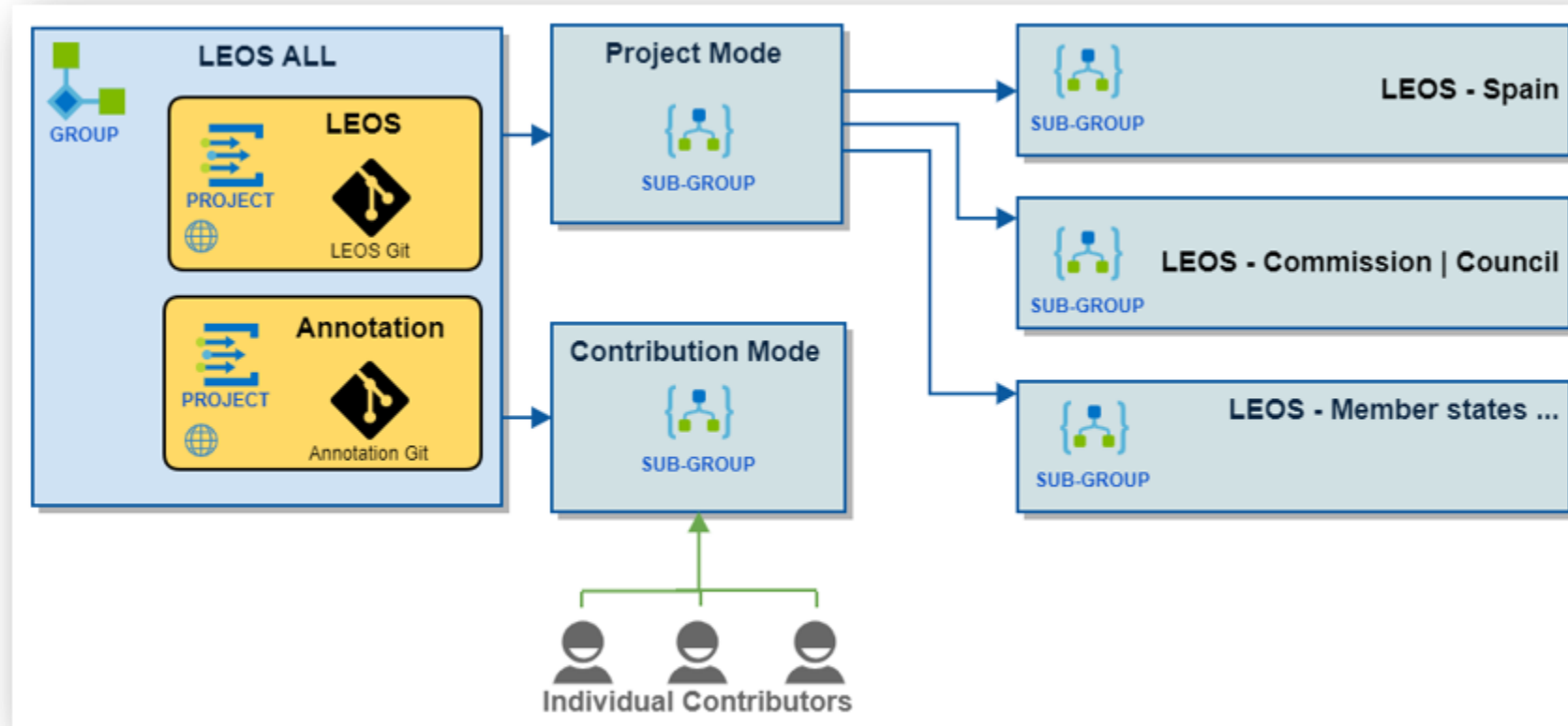
3 public groups  
3 internal groups

2

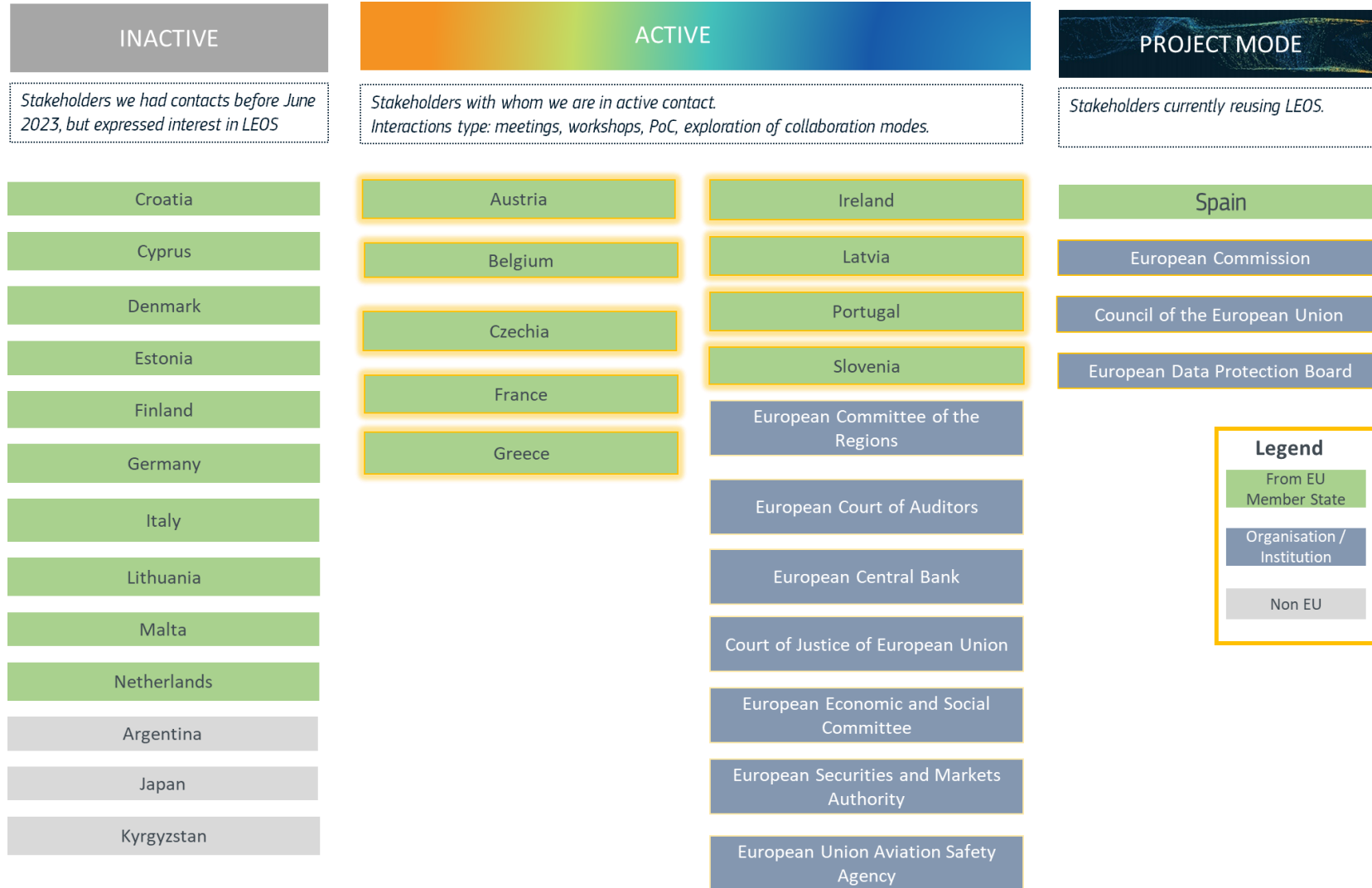
Repositories

LEOS core  
Annotate

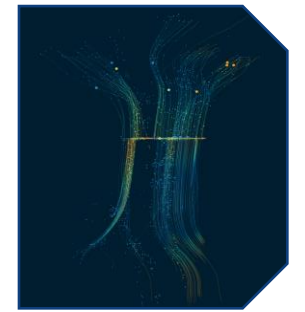
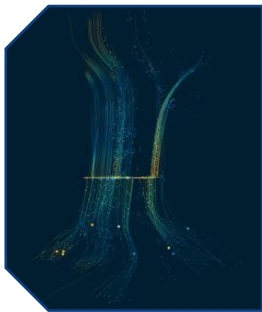
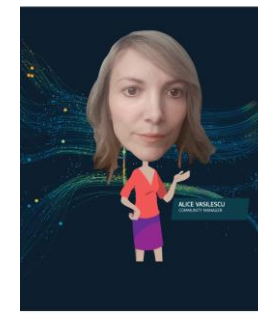
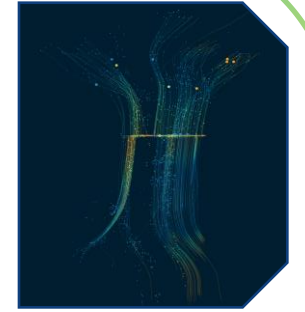
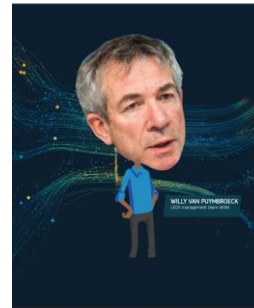
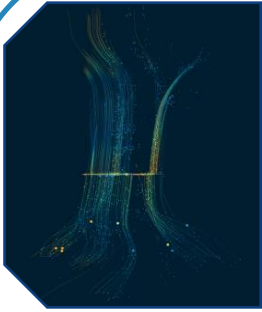
# Open Source Contribution and Project mode

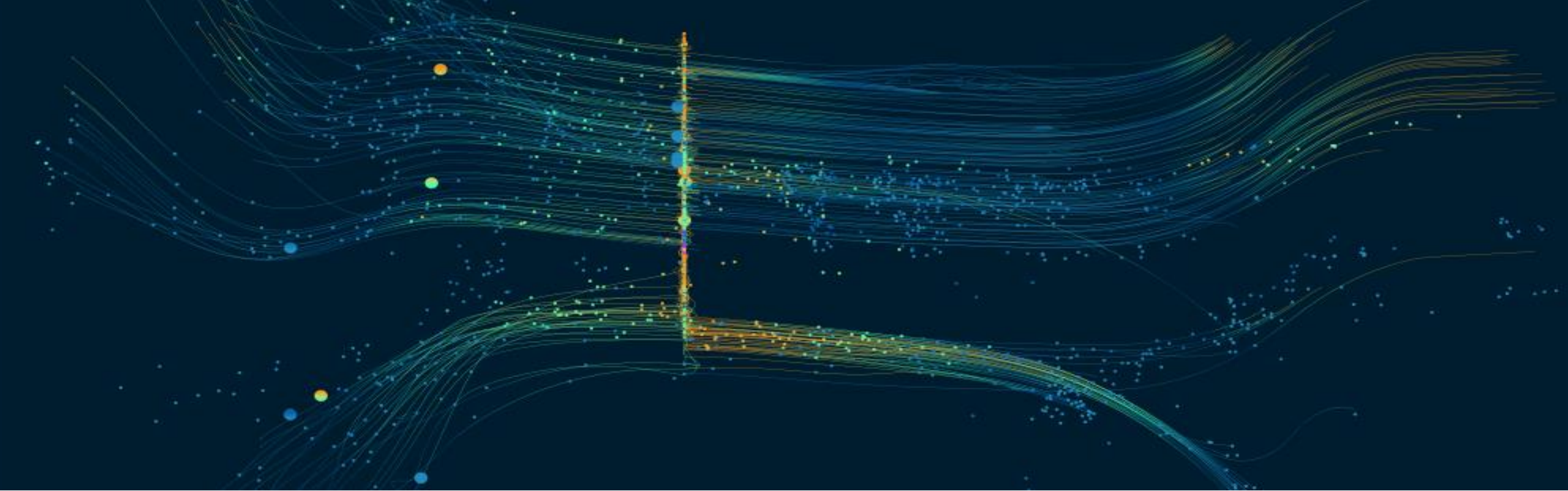


# Stakeholders' engagement



# LEOS core Team

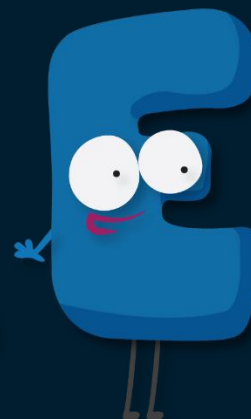
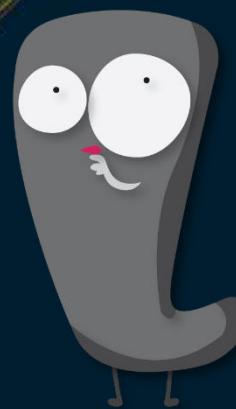




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# Annex III – BDTI references

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