

# The Alliance for Language Technology EDIC and the Common European Language Data Space

LDS workshop in Estonia

Philippe Gelin Head of Sector - DG CONNECT – G3

## Language Technology Landscape

LT Crucial for Preserving Identity and Competitiveness

Maintaining languages, cultures, and diversity

Achieving efficiency in a multilingual Europe

Turning diversity into opportunities



## Language Technology Landscape

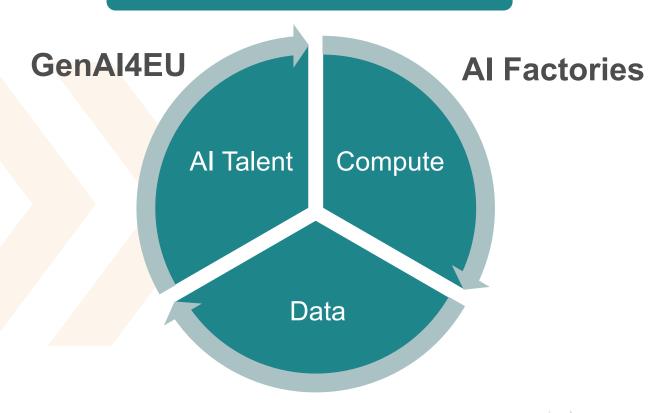
LT Crucial for Preserving Identity and Competitiveness

Maintaining languages, cultures, and diversity

Achieving efficiency in a multilingual Europe

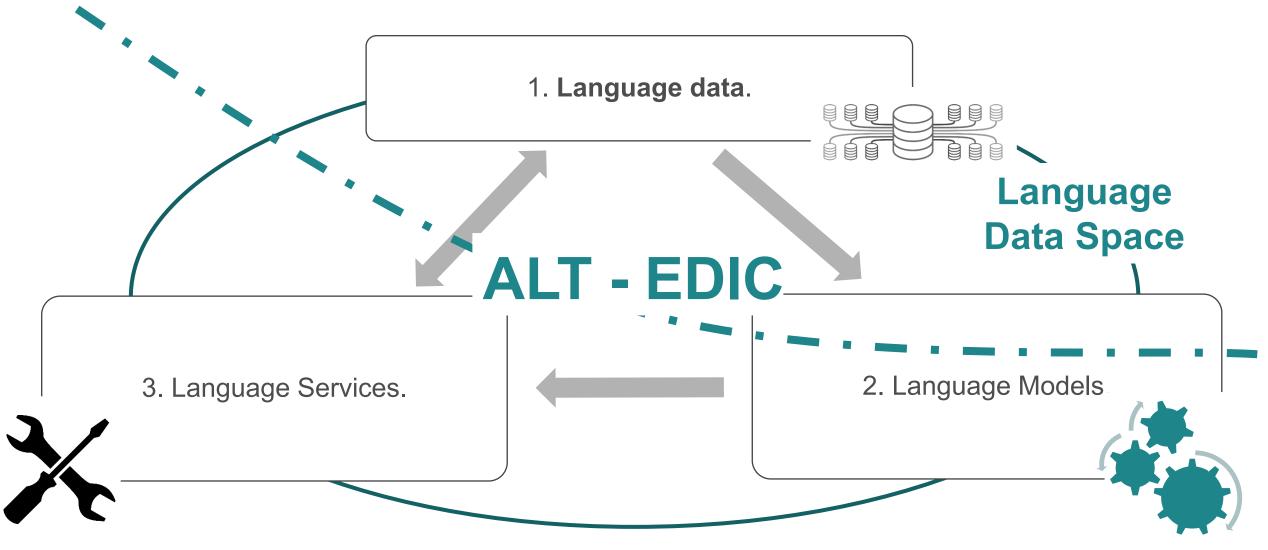
Turning diversity into opportunities

European Commission's Actions





## European Language Technologies Landscape



# The Common European Language Data Space (LDS)

- Overview
- Architecture



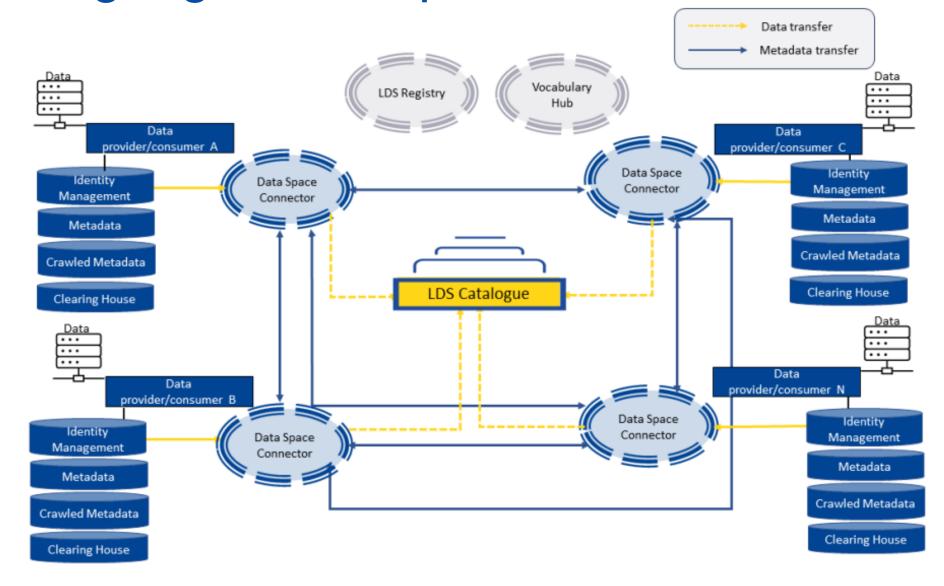
## Language Data Space – Overview



What	<b>Platform</b> and <b>marketplace</b> for the collection, creation, sharing and re-use of multilingual and multimodal language data	
	6 Mio € <b>Procurement</b> Contract from the <b>DIGITAL</b> Work Programme 2021-2022	
Why	Increase <b>availability</b> of clean, high-quality, compliant language data	
	Support the development of state-of-the-art European language technologies	
Who	Consortium: DFKI, ELDA, TILDE, Athena Institute	
	Governance: Member States representatives and Industry User group	
	Stakeholders: Industry, Public Administration, Research, etc.	
How	- Technical Architecture and Infrastructure	- Openness
	- Governance Framework	- Respect of EU Rules and Values
	- Promotion	- Overcoming Legal Barriers (IPR, GDPR, etc.)
When	Started in <b>January 2023</b> for Three years – until end 2025 (Possible contract renewal for another year).	
	Beta version in <b>Q1 2025</b>	
3		Furonean

## Language Data Space – Architecture

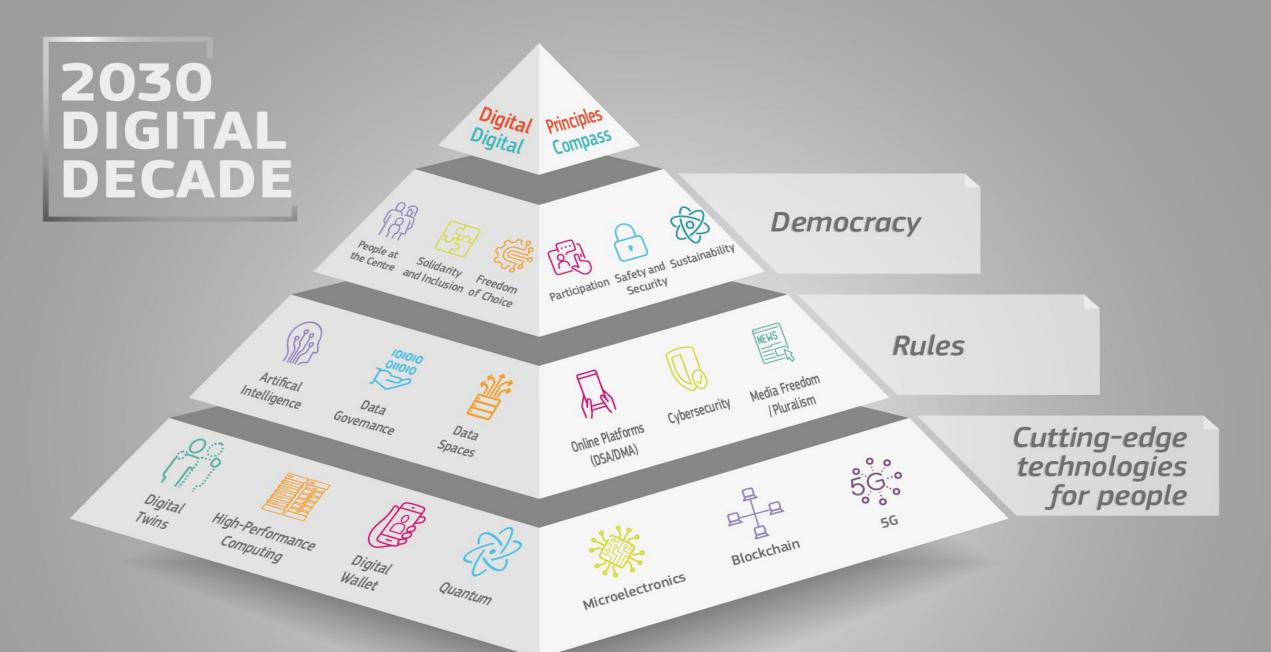






## Alliance for Language Technology EDIC (ALT-EDIC)







#### Alliance for Language Technologies European Digital Infrastructure Consortium

### Objectives

Preserve linguistic and cultural diversity in Europe

Technological leadership and strategic autonomy

Respect European rules and values

Cooperation

Raising awareness

## Participation Members [18]

FR, BG, CZ, DK, ES, FI, GR, HR, HU, IE, IT, LT, LV, LU, NL, PL, SI, Flanders

#### Observers [8]

AT, BE, CY, EE, MT, PT, RO, SK

#### Interested [2]

DE, SE

## Budget

#### **Projects (Costs)**

- LLMs4EU € 40 Mio - ALT-EDIC4EU € 4 Mio - OpenEuroLLM € 40 Mio

- LLM-BRIDGE € 6,8 Mio

#### Actions Plan

Federate MS and EU language data resources

Seed fund for new language models Fine-tuning existing language models

Ease HPC access

Support SMEs take up

European Ecosystem



## Action Plan - Data

#### **Data Ecosystem**

Support the development and training of Language Models (LMs)



#### **Language Coverage**

Ensures a diverse and inclusive linguistic landscape.

- All European Languages
- Addresses the scarcity of training data for specific languages (less spoken languages)

#### **Federation of Resources**

- Federate existing EU and Member States language and multimodal resources.
- Foster exchange and collection of high-quality language data

#### **Synergies**

- Leverage the capabilities of the Language Data Space.
- Synergies with Member States initiatives



## Action Plan – Existing Models

#### **Open-Source Repository**

- Creation of a comprehensive repository of existing open-source language models.
- Facilitating reuse by industrial actors within the ALT-EDIC ecosystem.



#### **Fine-Tuning Methods for SMEs**

- Development of tailored methods for fine-tuning language models.
- Focus on ensuring accessibility for SMEs in Al development.

#### **Methodologies for Evaluation**

- Introduction of robust methodologies for evaluating and certifying language models.
- Emphasis on ensuring high standards and performance in language technologies.

#### **Addressing Bias in NLP Models**

Implementation of measures for fair evaluation, certification, and normalization



## Action Plan – New Models

#### Seed fund for new Language Models

- ALT-EDIC operates as a central pool seed fund.
- Facilitates the aggregation of public and private resources for language model projects.

## New Models

#### **Public-Private Collaboration**

- Encourages collaboration between public and private entities.
- Aims to leverage diverse resources for robust and innovative language model development.

#### **Access to High-Performance Computing (HPC)**

- Provides essential access to European High-Performance Computing (HPC) resources.

#### **Project Launch and Development**

Enables the launch and ongoing development of new Large Language Model projects



## Action Plan – Ecosystem

#### **Advisory Hub**

- ALT-EDIC functions as a central advisory point.
- Offers guidance to public administrations on AI and language technologies.

#### Cultural Program on Al-based Language Technologies

- Implements a cultural program centered around AI for languages.
- Aims to engage the public in discussions and awareness about AI and language technologies.

#### Ecosystem

#### **Empowering Language Technologies End-Users**

- Focuses on empowering Language Technology end-users.
- Encourages end-users to become contributors and active participants in the Language Technology landscape.

#### **Multilingual Context**

- Addresses challenges of AI and language technologies in a multilingual context



## DIGITAL Work Programme 2024 (3 projects)

### ALT-EDIC4EU

€ 4 millions Coordination and Support Action (100%)

Support the
Coordination of a
European Language
Technologies
Ecosystem

### LLMs4EU

€ 20 millions Simple Grant (50%)

Support the Collection of Language Data
Support Fine-tuning of Large Language
Models

## **OPENEuroLLM**

€ 20 millions SME Grant (75%)

Develop and make available one opensource large language foundation model



## One Last Thought: Why it matters?

- Join forces with 18+ Member States to co-develop models and services
- Support Local Economy in adopting multilingual AI solutions
- Ensure your language is represented in European AI and language models
- It's not too late— You can still join ALT-EDIC as a full member
- Benefit from FSTP (cascade funding) opportunities in ongoing Digital Europe projects



## Thank you



© European Union 2023

Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0</u> license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

Slide xx: element concerned, source: e.g. Fotolia.com; Slide xx: element concerned, source: e.g. iStock.com

