



# EUROPEAN LANGUAGE DATA SPACE



**Common European Language Data Space:  
Developing a market for language data and services and  
benefitting from a joint European effort**

Firstname Lastname (Affiliation, Country)  
name@domain.tld

xx-xx-2024 LDS Country Workshop, City, Country  
<https://language-data-space.ec.europa.eu>



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# **Large Language Models**

# Context: Large Language Models

- Large language models are the most disruptive breakthrough in AI in recent history (BERT, GPT-3, ChatGPT, GPT-4 etc.)
- LLMs are based on vast amounts of training data
- LLMs use dozens, some even hundreds of terabytes of language and also image, video, audio etc. training data
- Europe's languages are vastly under-resourced, except English
- A concerted effort for the collection of enormous amounts of language data for all European languages is very much needed
- Already now billions and billions are made but ...

BUSINESS

# ChatGPT Shows Just How Far Europe Lags in Tech

Analysis by Lionel Laurent | Bloomberg

February 21, 2023 at 2:12 a.m. EST



Comment 1



Gift Article



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Europe is where ChatGPT gets regulated, not invented. That's something to regret. As unhinged as the initial results of the artificial-intelligence arms race may be, they're also another reminder of how far the European Union lags behind the US and China when it comes to tech.

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# Global LT/NLP Market is exploding: 439.85B\$ by 2030

PDF

Market Analysis Report

## Natural Language Processing Market Size, Share & Trends Analysis Report By Component, By Deployment Model, By Enterprise Size, By Type, By Application, By End-use, By Region, And Segment Forecasts, 2023 - 2030

Report ID: GVR-4-68040-020-4 | Number of Pages: 100 | Format: Electronic (PDF)

Historical Range: 2017 - 2021 | Industry: [Technology](#)

<https://www.grandviewresearch.com/industry-analysis/natural-language-processing-market-report>

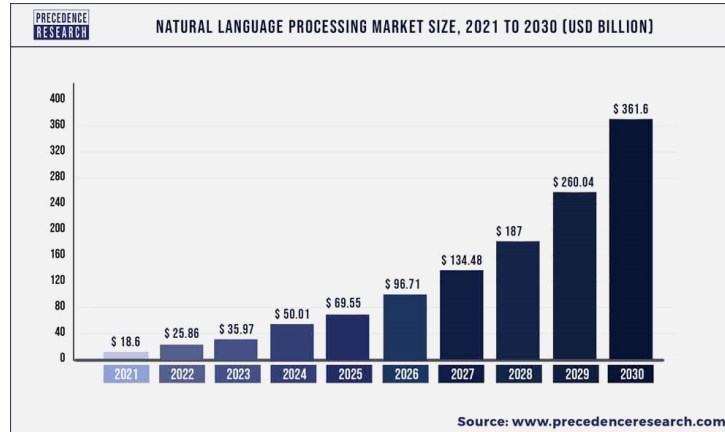
### Natural Language Processing Market Report Scope

| Report Attribute          | Details   |
|---------------------------|---|
| Market size value in 2023 | USD 40.98 billion                                 |
| Revenue forecast in 2030  | USD 439.85 billion                                |
| Growth rate               | CAGR of 40.4% from 2023 to 2030                   |
| Base year for estimation  | 2022  |
| Historical data           | 2017 - 2021                                       |
| Forecast period           | 2023 - 2030                                       |
| Quantitative units        | Revenue in USD million and CAGR from 2022 to 2030 |

Players leading the NLP market include-

- 3M Co. (US)
- IBM Corporation (US)
- Hewlett-Packard Co. (US)
- Oracle Corporation (US)
- Apple Inc. (US)
- Microsoft Corporation (US)
- SAS Institute Inc. (US)
- Dolby Systems Inc. (US)
- Verint Systems Inc. (US)
- Net base Solutions Inc. (US)

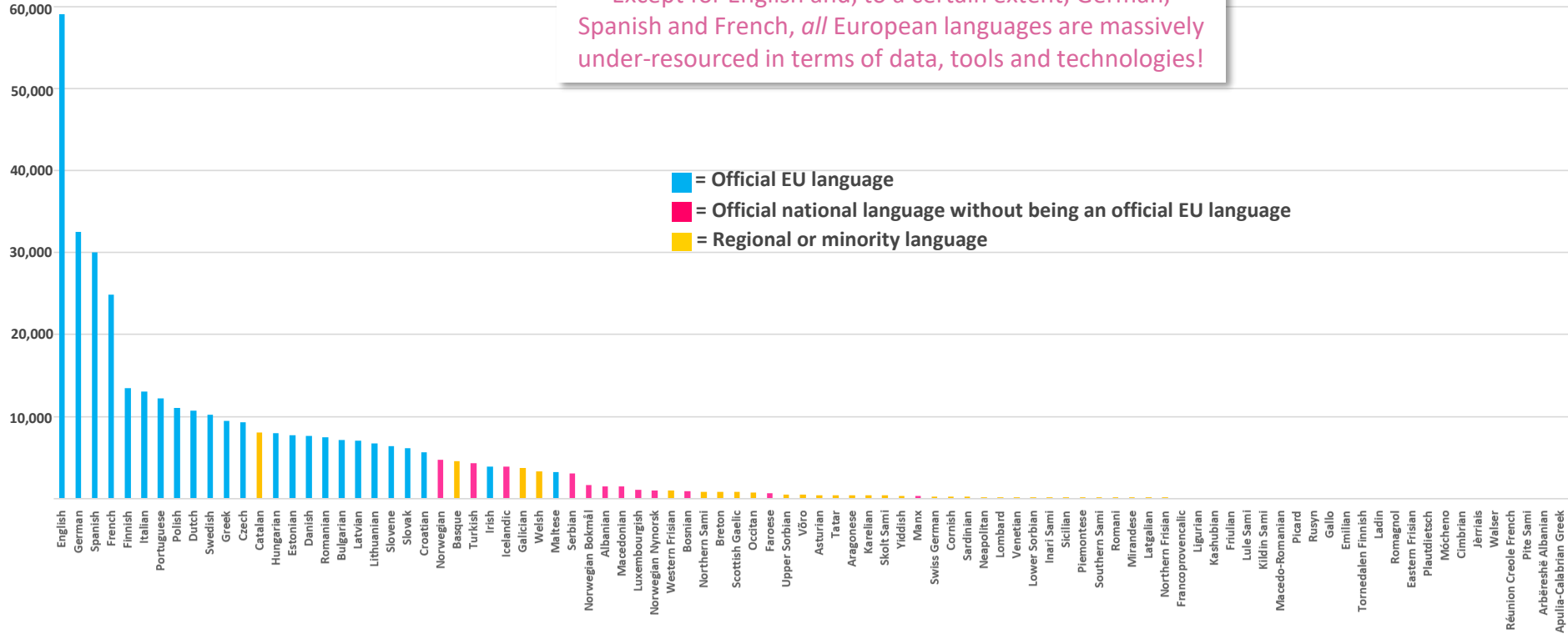
All US!



Without a decisive intervention by the EU, Europe will be pushed further to the side lines in the global NLP market.

# Digital Language Equality?

Except for English and, to a certain extent, German, Spanish and French, *all* European languages are massively under-resourced in terms of data, tools and technologies!







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# **Data Strategy & Data Spaces**

# EU Data Strategy & Data Spaces

- Data Spaces are an inherent part of the EU Data Strategy
- Various data economy and data infrastructure initiatives in Europe with slightly different goals and individual positioning but conceptual, technical, legal and operational overlap:
  - Data Spaces Business Alliance (DSBA): Gaia-X, IDSA, FIWARE, BDVA
  - EU: DSSC (incl. DSBA), SIMPL, approx. 20 data spaces
- The Common European Language Data Space is one of the approx. 20 official EU data space projects – focus on industry



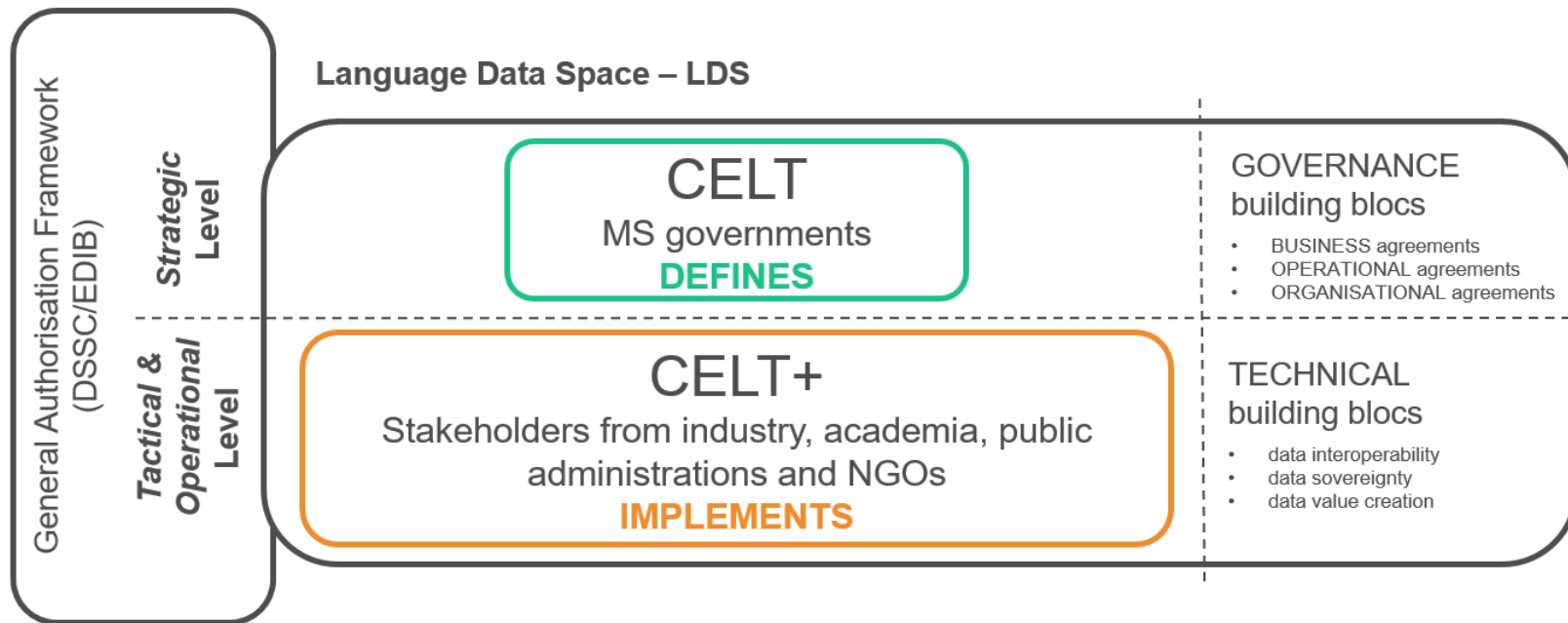
# Language Data Space

- Type of action: procurement (CNECT/LUX/2022/OP/0026)
- Budget: 6M€ (+ 2M€ if renewed)
- Runtime: 36 months (+ 12 months if renewed)
- Objective: Develop and deploy a European platform and marketplace for the collection, creation, sharing and re-use of multilingual and multimodal language data
- Salient features: governance framework, technical architecture and infrastructure, openness, promotion
- Stakeholders: industry, research, public administration, cultural associations, NGOs and citizens

# Establishment of the CELT and CELT+

| Establishment of the Centre of Excellence for Language Technologies (CELT)  | Establishment of a Multi-Stakeholder Governance Body (CELT+)  |
|---|---|
| Mission: <u>strategic</u>   | Mission: <u>tactical/operational</u>  |
| Members: governance representatives (from two different ministries from each Member State)                                      | Members: companies, research centres and other organisations – also: identify other stakeholders (60%/40% private/public distribution of members) |
| Nucleus of the future Language EDIC   | Periphery of the future Language EDIC   |
| Address collection, creation, sharing and re-use of data and models; aggregate initiatives and coordinate LDS governance scheme | Coordinate development of the blueprint, focus upon the technical building blocks and operational aspects of the LDS                              |
| Operational four months after inception meeting   | Operational six months after inception meeting  |
| Statutes ready in Q4 2023   | Statutes ready in Q4 2023/Q1 2024   |

# CELT and CELT+ Governance Bodies



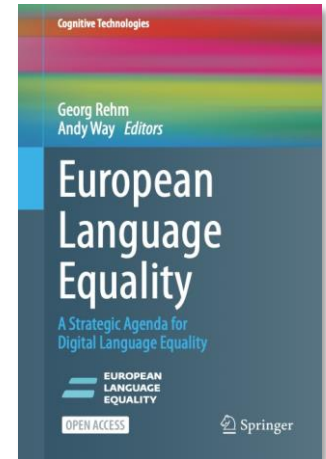
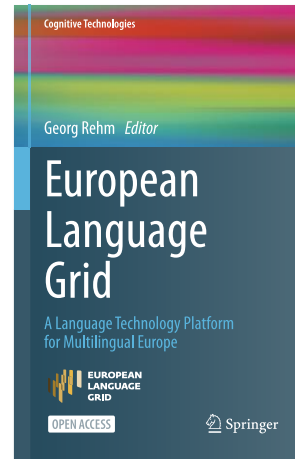
# Previous Projects and Initiatives

- The four core partners – DFKI, ILSP, ELDA, TILDE – have been involved in many joint projects and initiatives, including:
- **META-NET** (FP7, 2010-2013)
  - META-SHARE
- **ELRC** (CEF, 2014-2023)
  - ELRC-SHARE
- **ELG** (H2020, 2019-2022)
  - ELG Cloud Platform
- **ELE** (PP/PA, 2021-2023)

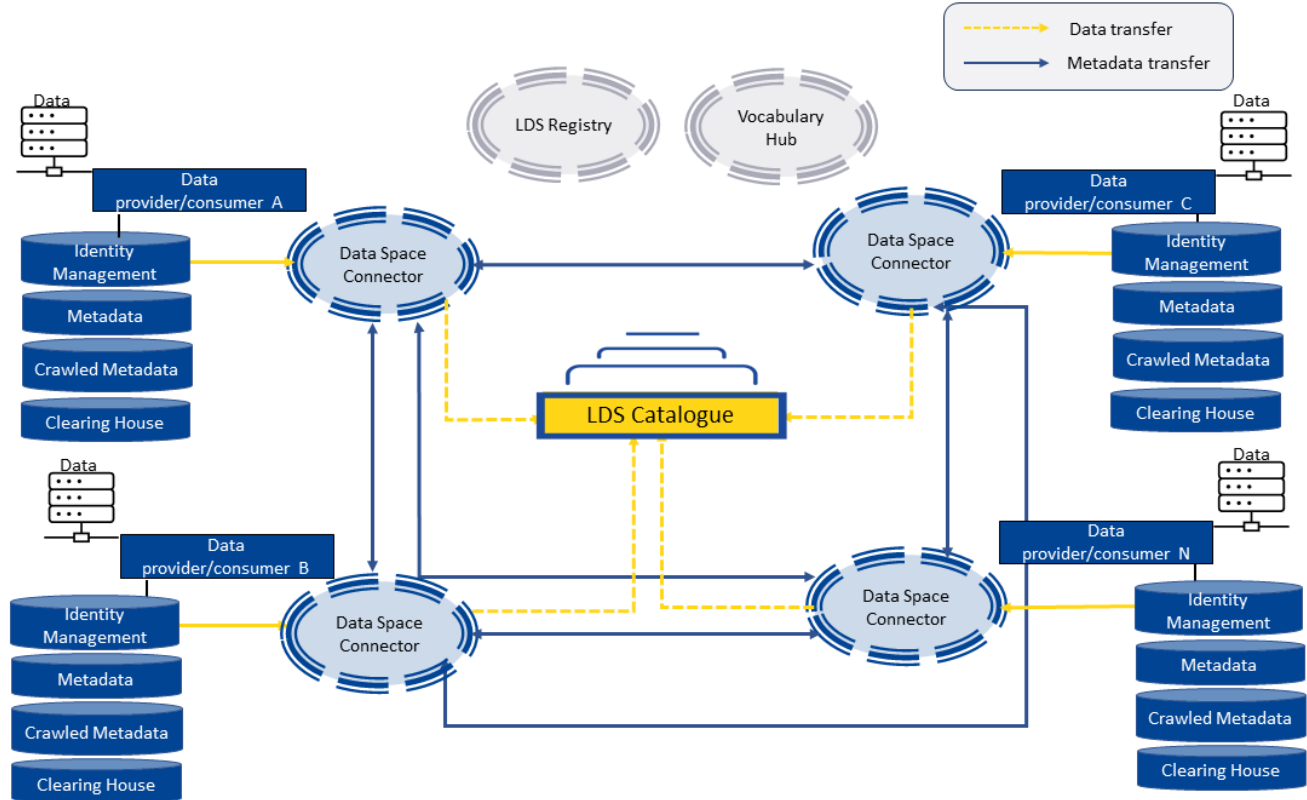
**META**  **NET**



The **technical development in LDS** will be informed by ELG, ELRC-SHARE, META-SHARE.



# The LDS Decentralised Architecture



## Collaborations (selection)

- **DSSC** (Digital, EU; Community of Practice; Thematic Groups; Expert Groups)
- **OpenGPT-X** (Gaia-X; BMWK, Germany)
- **HPLT** (EU Horizon Europe)
- **DataBri-X** (IDSA; EU Horizon Europe)
- **European Language Grid** (ELG) – currently supported through OpenGPT-X, SciLake, DataBri-X – legal entity work in progress
- **European Language Equality** (ELE, EU PP/PA project)
- **INESData** (new language data space project in Spain; 65% of the 5M€ funding for industry for development of actual platform)
- **SciLake** (EOSC; EU Horizon Europe)



The screenshot shows the homepage of the European Language Data Space. At the top, there is a navigation bar with the European Commission logo, the text 'European Language Data Space', and a search box. Below this is a main banner with the title 'European Language Data Space' and the tagline 'Data for everyone - Share. Connect. Benefit.' A yellow button invites users to 'Subscribe to the LDS Newsletter'. The main content area features three columns: 'Share', 'Connect', and 'Benefit', each with an image and a brief description of the service. Below this is a 'Latest News' section with three articles: 'What is a Data Space?', 'LDS at META-FORUM 2023', and 'LLM workshop review'. At the bottom, there are social media links for Twitter, Facebook, LinkedIn, and YouTube, along with contact information and a footer with the European Commission logo and various links.

## About



On 19 January 2023, the service contract between the European Commission and a consortium of four partners on the creation and implementation of a Common European Language Data Space came into force.

The goal of this project is to establish a European platform and marketplace for the collection, creation, sharing and re-use of multilingual and multimodal language data.

With the European Language Data Space (LDS), relevant stakeholders, e.g., from the publishing, language technology or press industry, will be able to share and also monetise their language data and other language resources (e.g., language models) through a single platform, taking EU values and compliance with EU rules fully into account. As a result, the LDS will significantly increase the much-needed availability of quality data to support the creation and deployment of large language models (LLMs) and other AI-based language technology services for a range of businesses.

The creation of the LDS platform will represent a true turning point in the approach to the collection of language resources, as it will help the European industry to compete globally with the LT services provided by US companies, and to build trust throughout the language data sharing process.

The LDS Consortium, coordinated by the Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI) [\[2\]](#), includes the R.C. "Athens" with its Institute for Language and Speech Processing (ILSP) [\[3\]](#), the Evaluations and Language Resources Distribution Agency (ELDA) [\[4\]](#) and the technology and localisation company Tilde [\[5\]](#).

## News (6)

Showing results 1 to 6

13 June 2023

### What is a Data Space?

Find out more about the concepts behind Common European Data Spaces.

7 June 2023

### LDS at META-FORUM 2023

The second ELE Conference will take place in Brussels on 27 June.

5 June 2023

### LLM workshop review

The CONNECT University online session on Large Language Models, co-organised by the European Language Data Space consortium, took place on 6 June.

16 May 2023

### Experience and Expertise

For the realisation of the ambitious goals set by the project, the LDS Consortium builds on the experience of its partners, which covers language technologies research and development – from data collection up to platform, infrastructure and processing aspects.

30 March 2023

### Data Spaces Symposium 2023

The Data Spaces Symposium took place from 21 to 23 March 2023 in The Hague, and it was a resounding success. The event featured 150 expert speakers on five different stages and attracted over 700 visitors on the first day alone.

22 January 2023

### The Common European Language Data Space

On 19 January 2023, the service contract between the European Commission and a consortium of four partners on the creation and implementation of a Common European Language Data Space (LDS) came into force.

<https://language-data-space.ec.europa.eu>



Common European Language Data Space

**Thank you!**



A Common European Language Data Space – funded under contract LC-01936389 with the European Union.

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xx-xx-2023 Name of the event, City, Country  
<https://language-data-space.ec.europa.eu>