



# EUROPEAN LANGUAGE RESOURCE COORDINATION (ELRC) AND BEYOND

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# ELRC CONTEXT AND OBJECTIVES





# WHO WE ARE

#### THE ELRC CONSORTIUM











STARTED in April 2015

# CURRENT CONTRACT until end of 2022

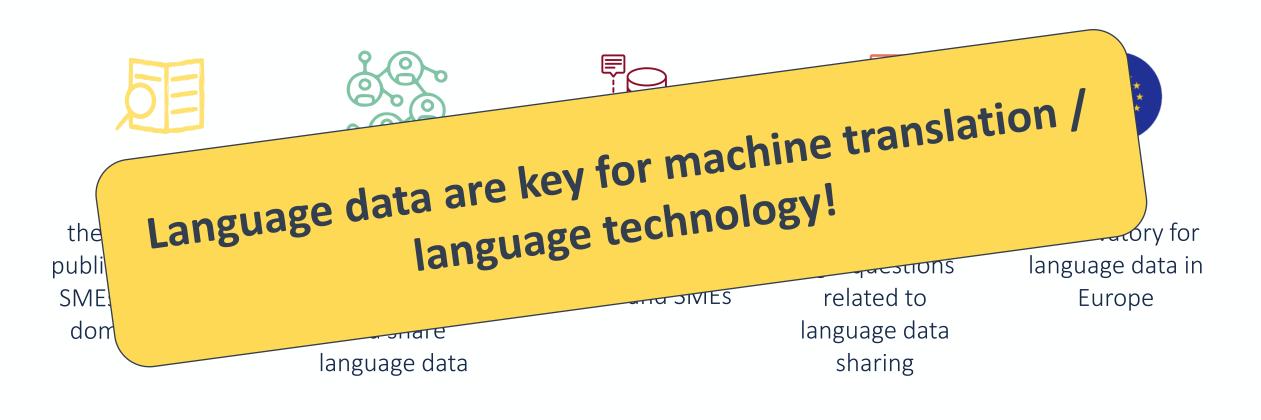
#### **G**OAL

To provide language resources to improve coverage and performance of automated translation solutions in the context of current and future CEF digital services





# **ELRC OBJECTIVES**

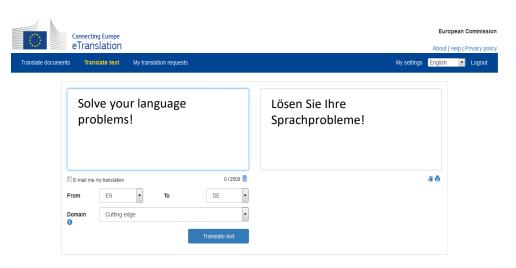






# **ELRC:** Language Data for eTranslation

- CEF eTranslation helps public services being multilingual:
  - Neural machine translation tool provided by the European Commission to all EU bodies but also public services and public administrations across Europe
  - for 24 official languages of the EU (24 <-> 24), Russian, Chinese, Turkish, ...
  - Secure & scalable
  - Facts and Figures:
    - 70+ systems connected to eTranslation
    - 7.000+ SMEs registered
    - More than 240 Mio. pages translated
- Goal: ELRC provides <u>language resources</u> to make eTranslation work for different languages and domains!







### **ELRC:** Language Data for Inclusion

- Additional dimension of ELRC: To provide language resources to overcome language barriers in public services and the European Digital Single Market in general
- Example: Digital Service Infrastructures (DSIs)











#### **BRIS**

Citizens and business partners need legal certainty when doing business crossborder

#### **ODR**

Citizens need to solve disputes online across borders

#### eHealth

Citizens need to have access to medical information and their patient data when abroad

#### **EESSI**

Citizens enjoy seamless exchange of social security information when abroad

It also includes

e-Justice

**Open Data** 

**eProcurement** 





# Language Resources (LR) collected within ELRC

ELRC collects the following types of language data:



# Corpora

- •Set of documents or text in one or more languages
- official documents / translations in the official administration (decisions, legal acts etc.);
- articles, reports, magazines, newsletters, etc.;
- Translation Memories (i.e. aligned text segments in the source and target language)



# Models

•Language or translation models

# esources

 $\Delta$ 

# •Lexical & Conceptual Resources

- Terminologies
- Glossaries
- Thesauri
- Wordnets
- Ontologies





# ELRC Network & Outreach Activities





# **ELRC N**ETWORK

National Anchor Points (NAP) in each country www.lr-coordination.eu/anchor-points







# **ELRC Progress and Growth**

#### PHASE 1:

- Initial Roadshow (Country Workshops)
- Set-up of ELRC Network (T-NAP plus P-NAPs)
- Set-up of data collection & validation workflow
- Technical and Legal Helpdesk

#### PHASE 2:

- Sustainability, local ownership
- Extension of ELRC Network on national level (600 data donors)
- Extended data collection (crawling)
   & validation workflow (Generic
   Services Projects)
  - Addition: On-site assistance

#### PHASE 3:

- Sustainability, re-usability, opening (SME)
- Extension of ELRC Network (> 6.000 data donors and users)
- Extended data collection (speech, tools and services, ...)
  - New languages (RU, CN, ...)





# TRADITIONAL ELRC OUTREACH AND NETWORKING ACTIONS











# SINCE COVID-19 PANDEMIC: ELRC ON SOCIAL MEDIA



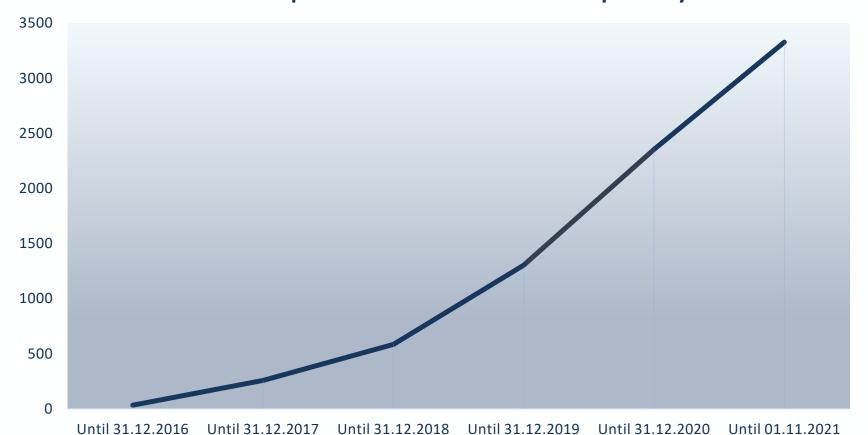






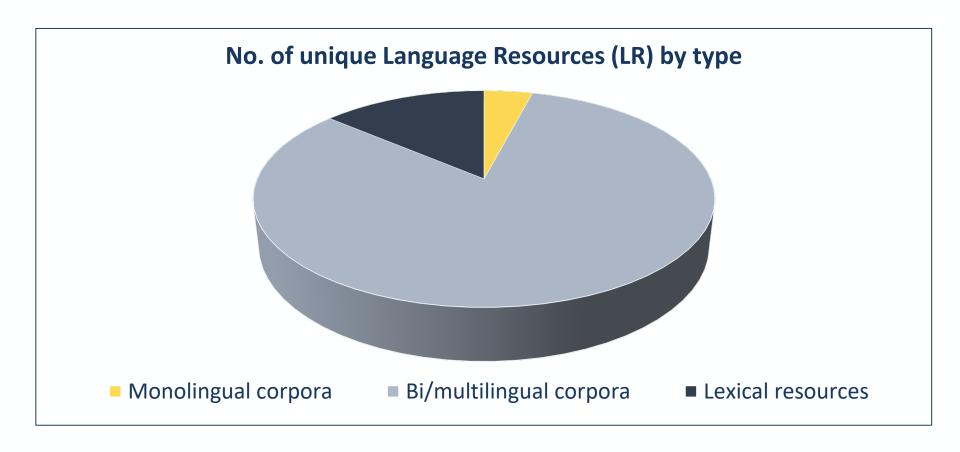


#### No of unique LR on the ELRC-SHARE Repository



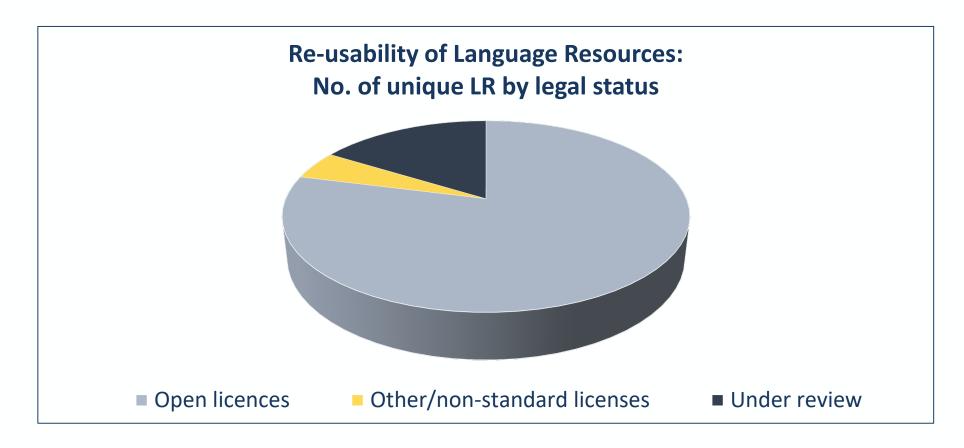








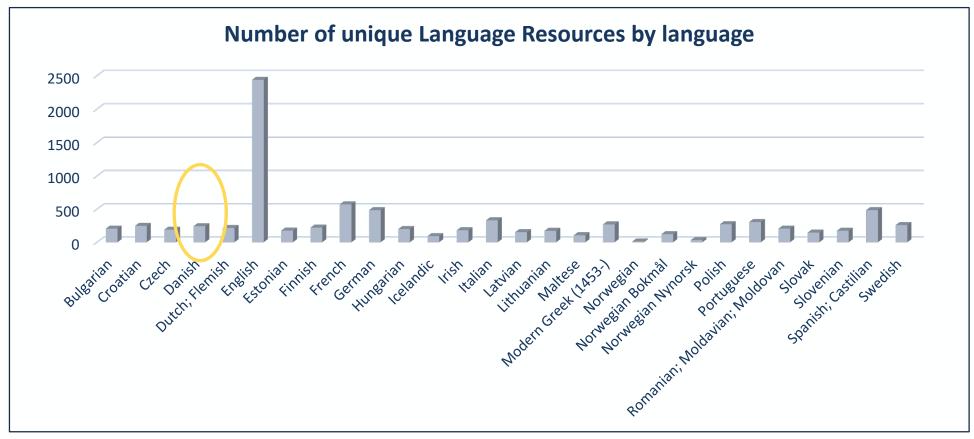








# CONTRIBUTIONS BY LANGUAGE

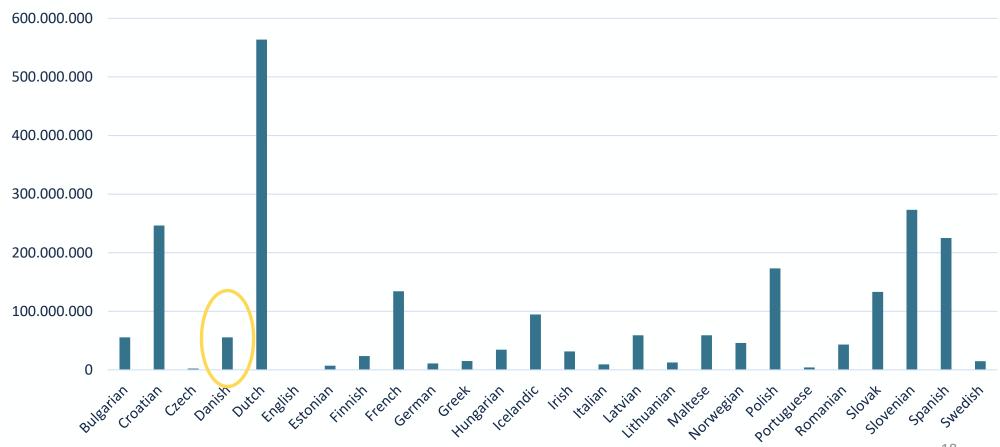






# COLLECTED WORDS IN MONOLINGUAL CORPORA

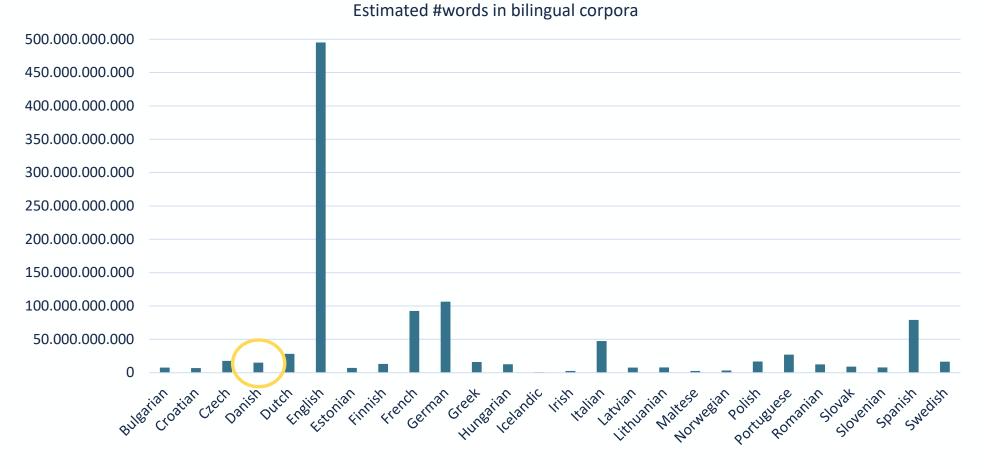
Estimated #words in monolingual corpora







# COLLECTED WORDS IN BILINGUAL CORPORA

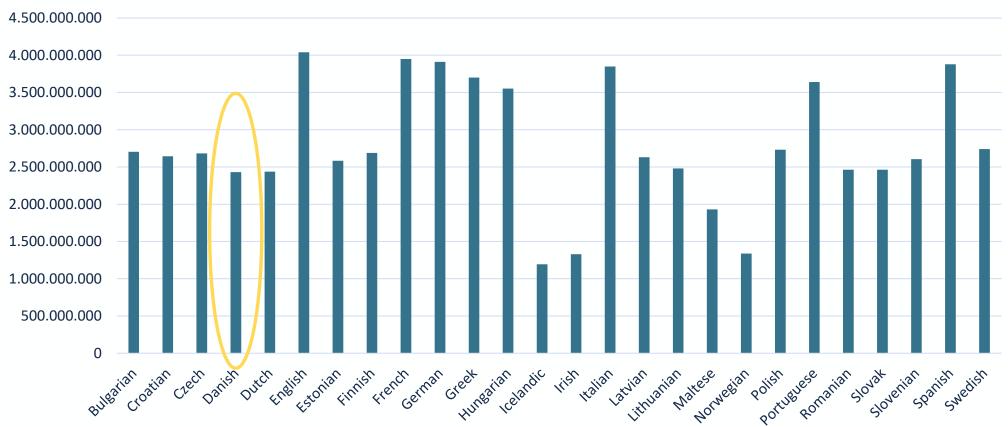






# COLLECTED WORDS IN MULTILINGUAL CORPORA

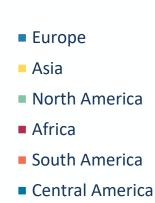
#### Estimated #words in multilingual corpora





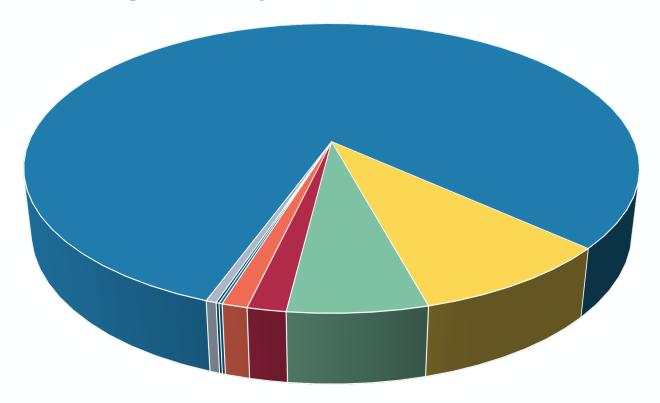


### **Page visits by Continent**



Oceania

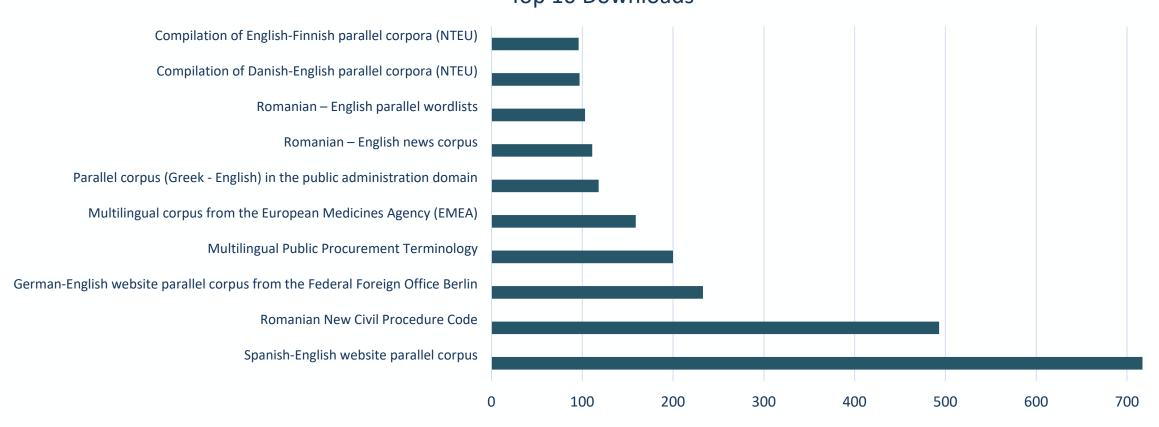
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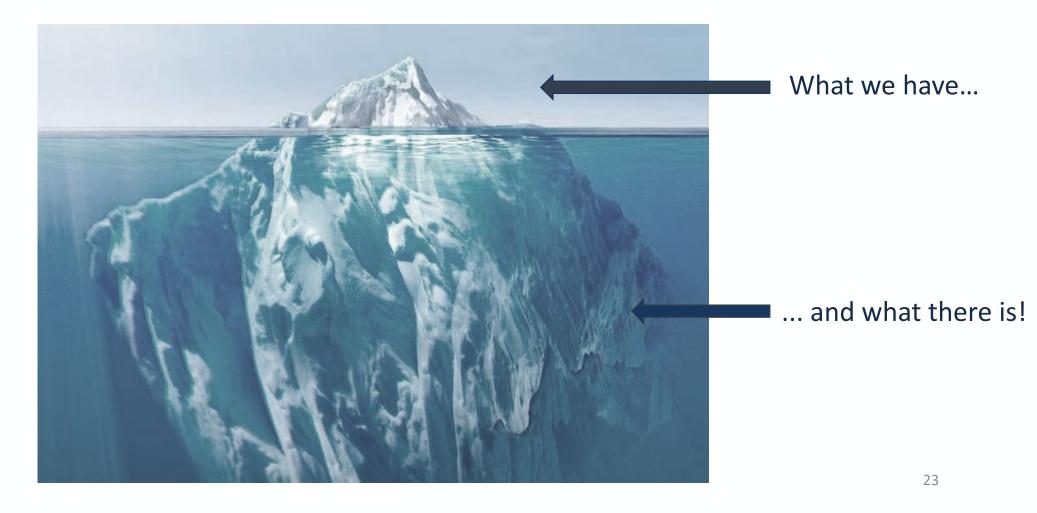








# STATUS QUO: THE TIP OF THE ICEBERG







### DONATING LANGUAGE DATA TO ELRC







#### **ELRC-SHARE**

ELRC Language Resource Repository

www.elrc-share.eu

#### **ELRC Helpdesk**

for any questions on technical or legal aspects related to the use, production, collection, processing and sharing of LR.

www.lr-coordination.eu /helpdesk

# Catalogue of CEF eTranslation Services

676 language tools/services
offered by
<u>CEF eTranslation</u> and third-party services

https://cef-at-servicecatalogue.eu





# ELRC: CHANCES, CHALLENGES AND OUTLOOK





# THE ELRC WHITE PAPER

- Stakeholders
- Infrastructure for LR sharing
- Challenges for LR sharing
- Recommendations & Actions
- Annex: Country Profiles
- Please visit: <u>www.lr-coordination.eu</u>
  - → Helpdesk → Infopoint







# MAJOR CHANCES

- Great number of potential data holders!
- More than 4.000 individuals from several hundred organisations
- But again: This is only the tip of the iceberg!







# MAJOR CHALLENGES

- Lack of appreciation of the value of language data

Updated ELRC White Paper in 2022! Initial findings to be presented at upcoming LRB Meeting on 25 November!

Legal concerns

Scan for more info!







# DEVELOPMENTS AND OUTLOOK

Extending Country Profiles and White Paper through Country Workshops

- 16 ELRC Country Workshops conducted under the current contract since end of 2020, another 13 are in the planning for end of 2021/2022
- Dedicated session on "Language Data creation, management and sharing"
- Define ways of overcoming obstacles in each country and across Europe

Increasing language coverage

- Initially only EU official languages plus Norwegian and Icelandic (as CEF affiliated countries)
- Recently also Russian (end of 2019), Chinese (mid 2020), and other languages added based on increasing demand for new languages

Opening of eTranslation for SMEs

• eTranslation is available to SMEs as well since March 2020





# DEVELOPMENTS AND OUTLOOK

Extending collection of LR

- Relevant language tools for all EU official languages, Icelandic and Norwegian are available in the ELRC-SHARE (<a href="https://elrc-share.eu/">https://elrc-share.eu/</a>)
- Speech and multimodal data are being considered too for inclusion

Adjusting outreach activities to COVID-19 pandemic limitations

• ELRC Social Media Campaign since summer 2020 with help of the LRB

Defining and developing Language Technology Specifications

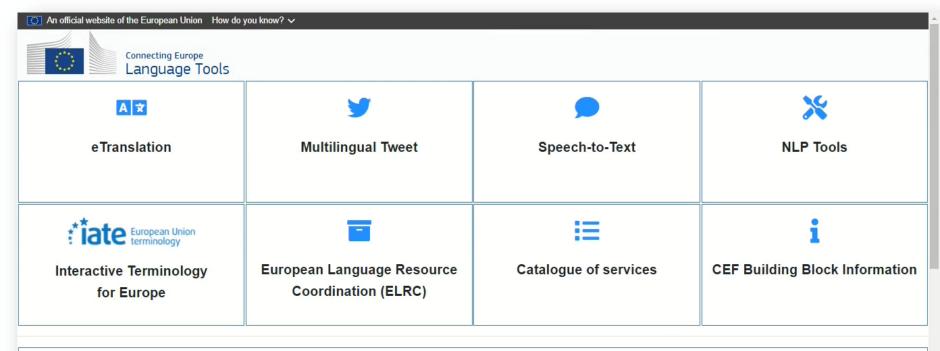
- The purpose is to support the creation of technical specifications or best technical practices for the language technology applications in CEF eTranslation.
- Anonymisation API specification ready for implementation





# **SPEECH-TO-TEXT TRANSCRIPTION**

https://language-tools.ec.europa.eu/SpeechServices/Transcription



Access to some of these tools requires registration. EU staff are pre-registered. Please visit the registration page: https://webgate.ec.europa.eu/etranslation/public/welcome.html. For any other issues, please contact help@cefat-tools-services.eu.











# **CATALOGUE OF SERVICES**



https://cef-at-service-catalogue.eu/

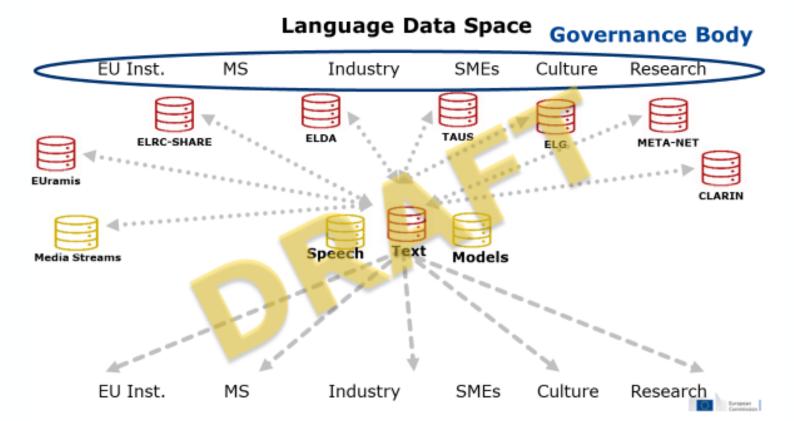






# Soon to Come under DIGITAL Europe









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