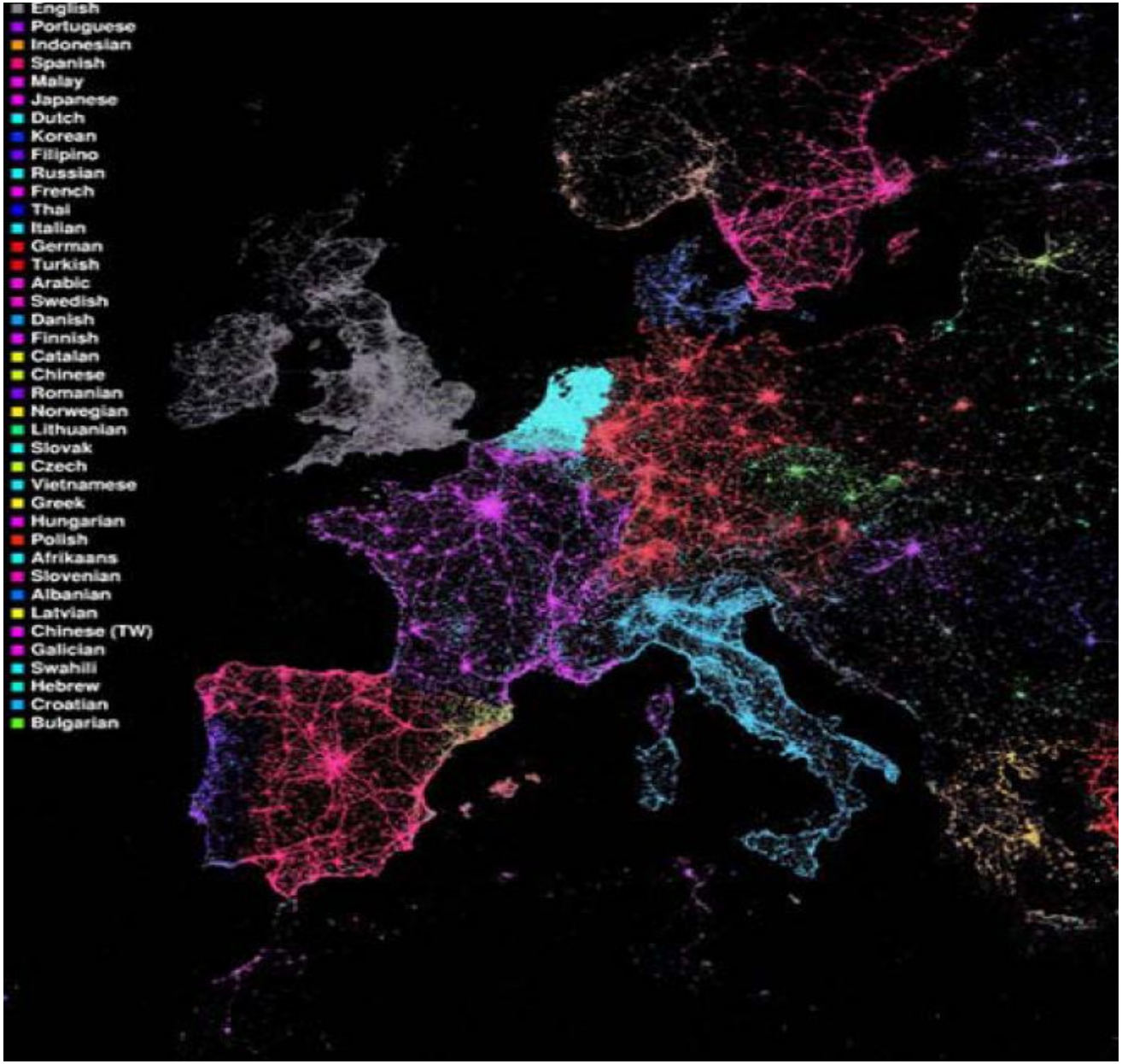
European Language Resource Coordination
Connecting Europe Facility

European Language Resource Coordination (ELRC)

Stelios Piperidis
Athena RC/ILSP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Swedish
Danish
Finnish
Catalan
Chinese
Romanian
Norwegian
Lithuanian
Slovak
Czech
Vietnamese
Greek
Hungarian
Polish
Afrikaans
Slovenian
Albanian
Latvian
Chinese (TW)
Galician
Swahili
Hebrew
Croatian
Bulgarian

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Context

- Nobody speaks all languages
- Make sure languages do not create silos or invisible borders
- Restricting mobility of people, information, ideas, commerce

- No language discrimination but equal opportunities
- Languages as an asset, not a problem

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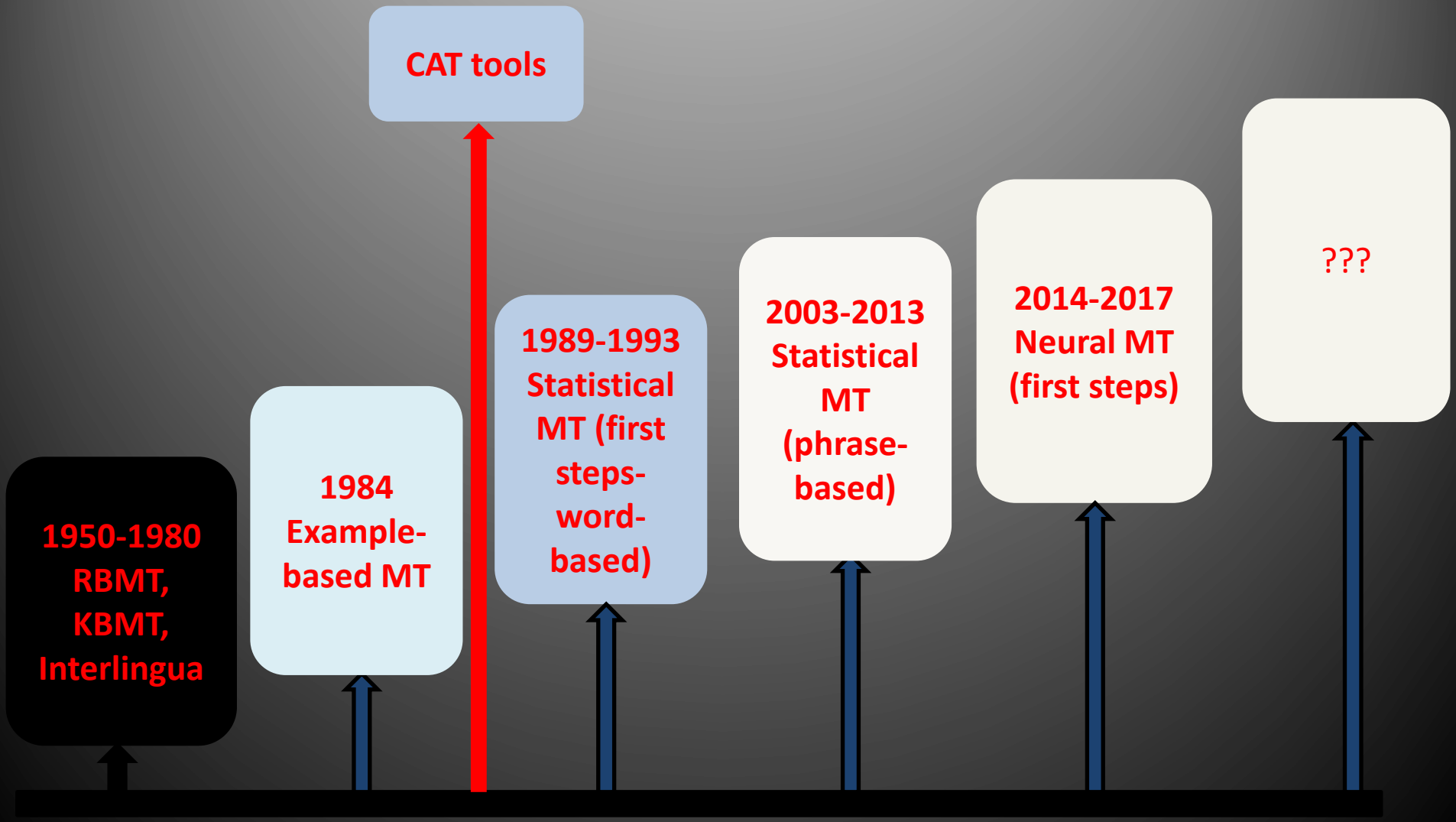
Context

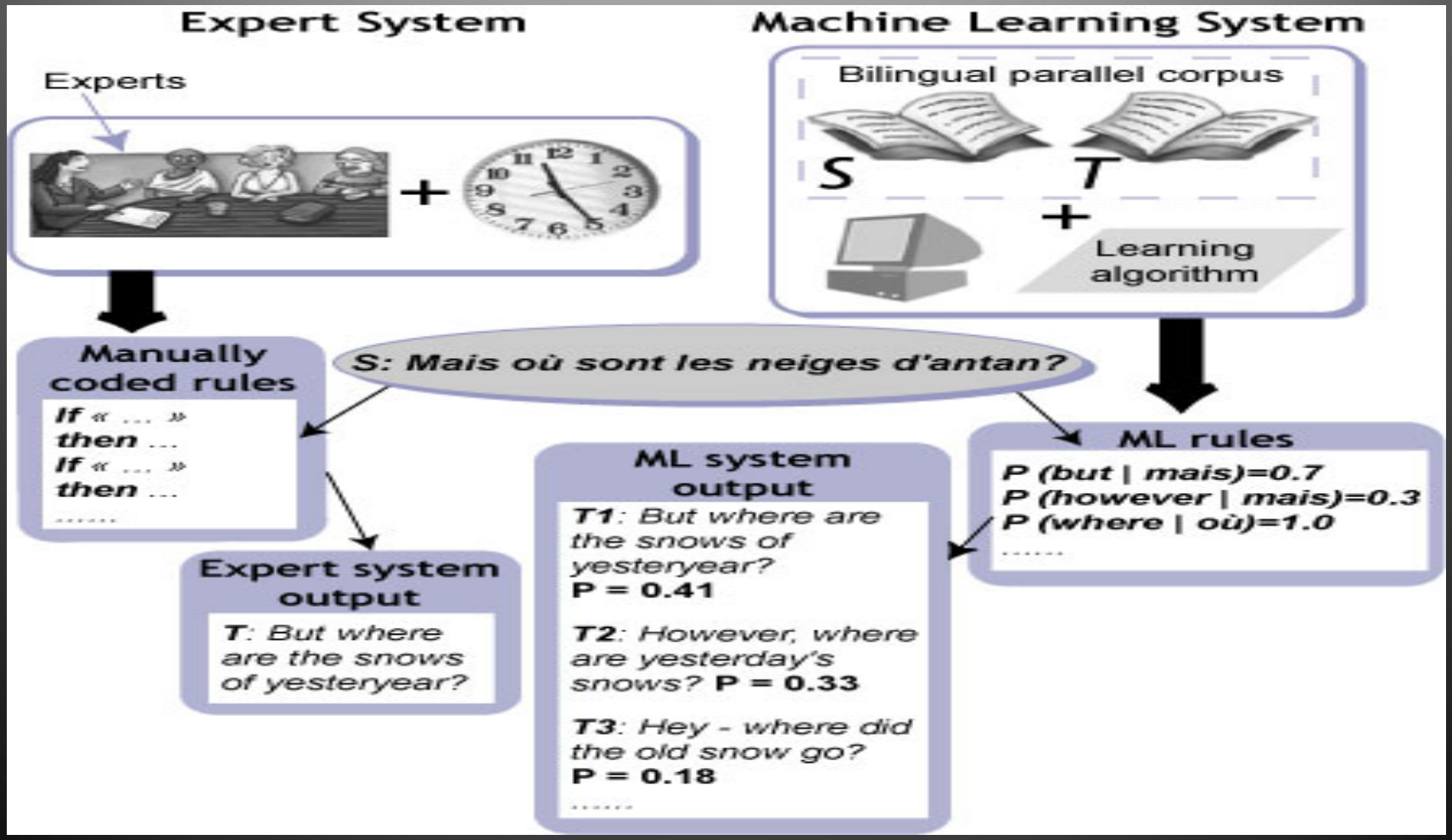
- How?
- Translation!
- Extremely skilled profession

- A lot to translate … in fact much too much
- Technology support
- Human translation supported by technology = Automated Translation (AT)

Machine Translation Evolution



Methodological evolution



Rationalism Vs Empiricism

Rationalism vs. Empiricism

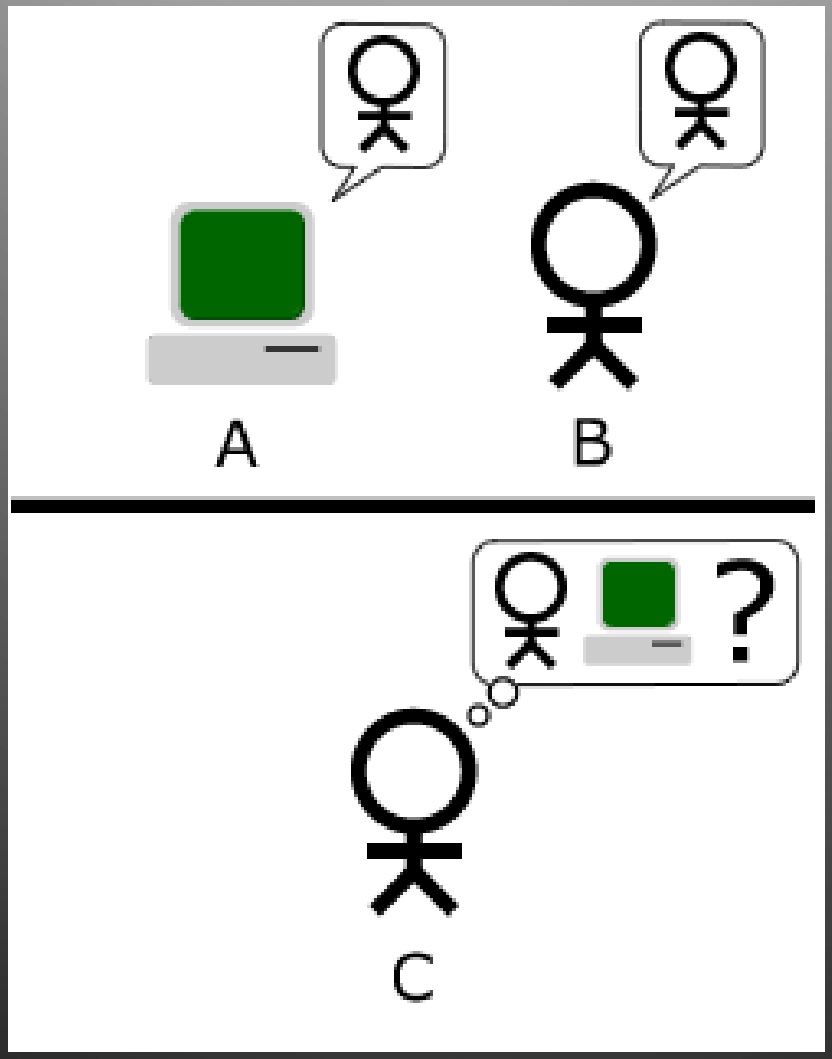
Rationalism

1. Emphasizes on *theory*
2. Assumes an "*innate language faculty*"
3. Aims at discovering the *language of the human mind* (linguistic competence)
4. Assigns *categories* to language units
5. Major advocates: Chomsky, Minsky

Empiricism

1. Emphasizes on *data*
2. Assumes all knowledge gathered only via *senses*
3. Aims at analysing *language as it actually occurs* (linguistic performance)
4. Assigns *probabilities* to language units
5. Major advocates: Shannon, Norvig

The Turing Test



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Data

- Modern MT is all about data
- Learns to translate from human translations = data

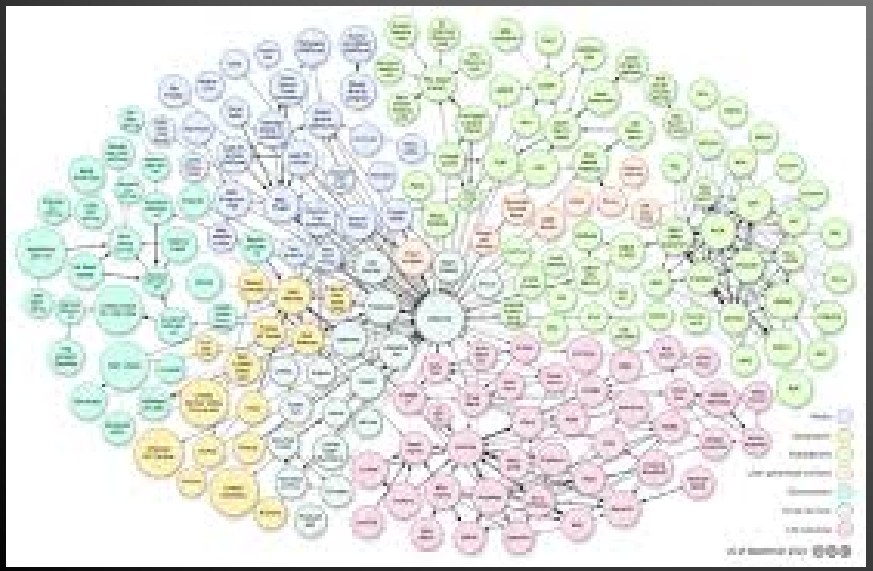
- To best support your needs MT needs the best data

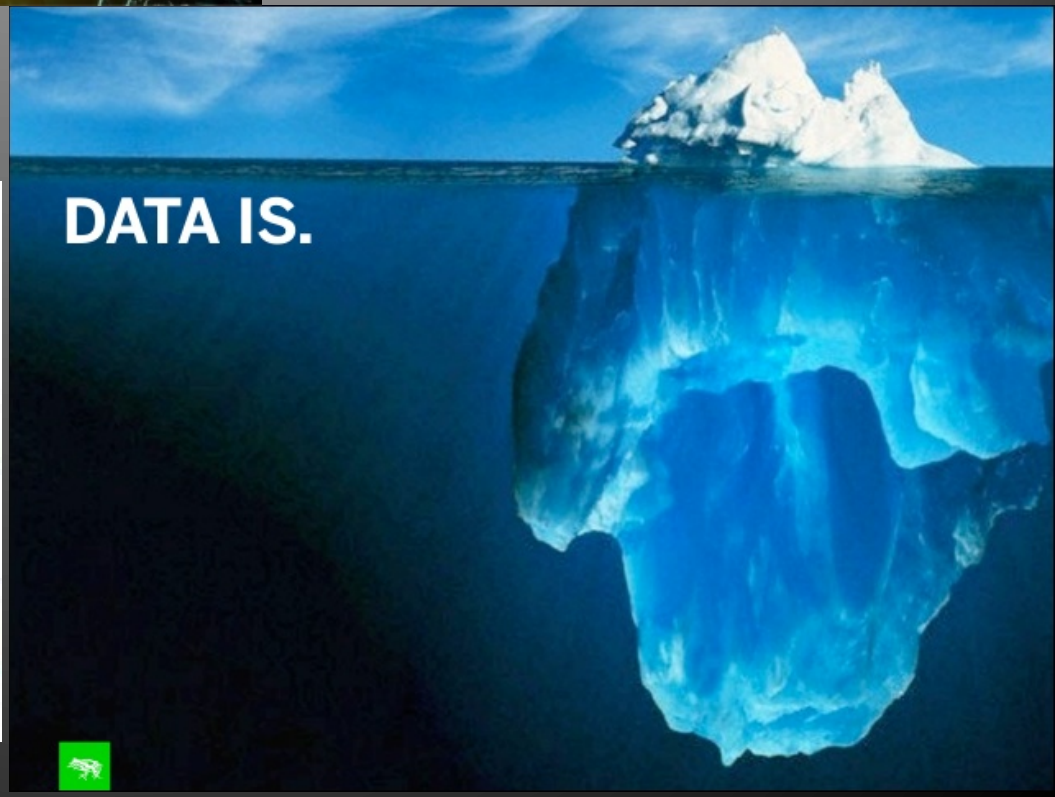
- Your data = the best data for MT for you

- Without the right data it won't work!

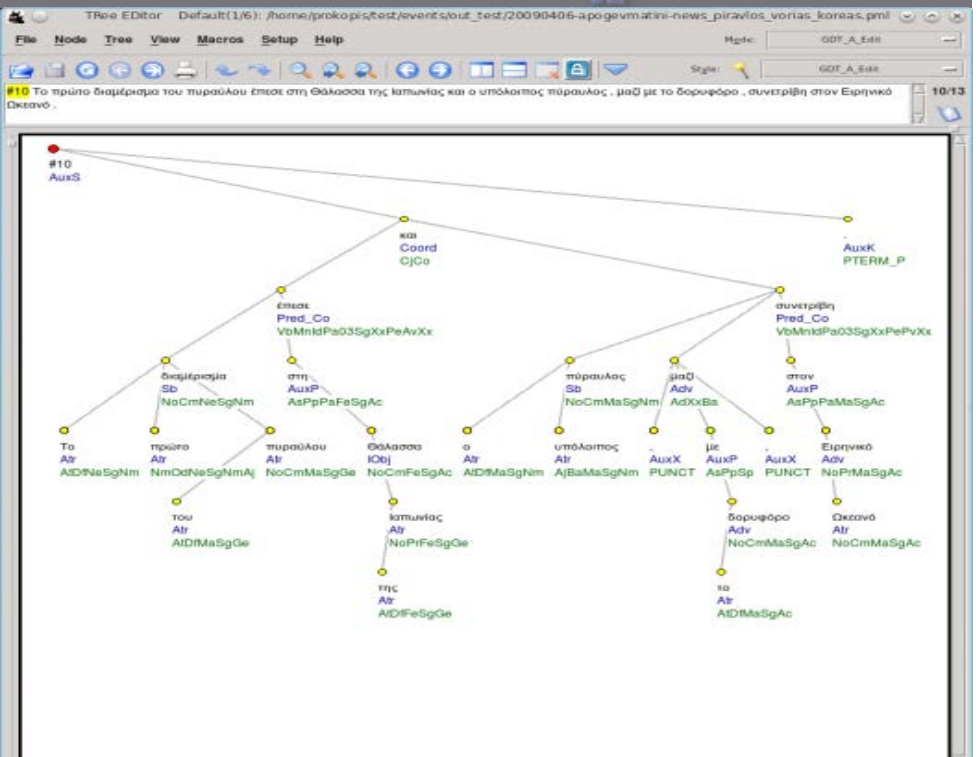
DATA is

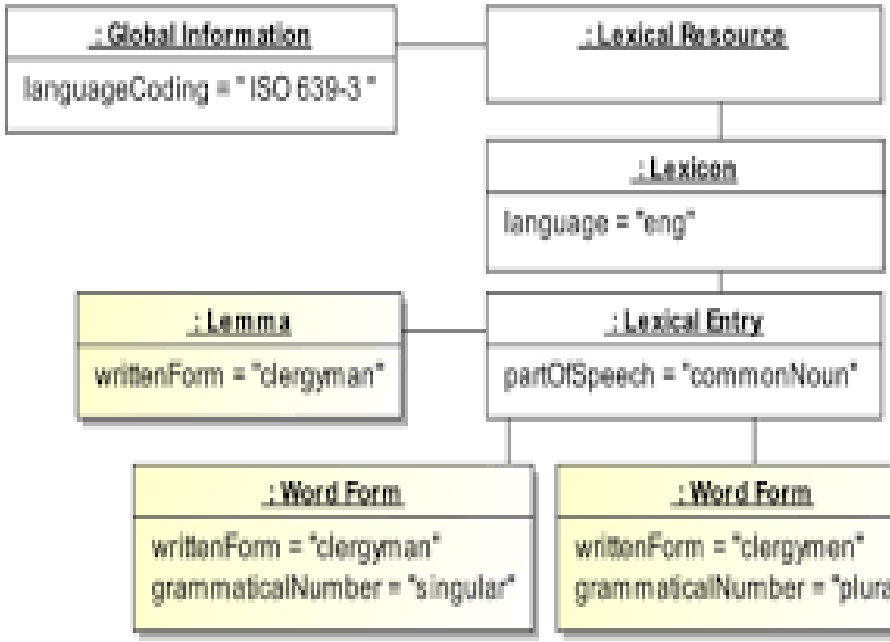
Everything





LANGUAGE
RESOURCES
FRANÇAIS
DEUTSCH
HRVATSKI
ITALIANO
ENGLISH
PORTUGUÊS
ESPAÑOL
TIẾNG VIỆT
TÜRKÇE
Русский
Български
Эрзянь
Молдовеняскэ
Словѣньскъ
Ming-dĕng-ngū
العربية
עברית
हिन्दी
ગુજરાતી
ಕನ್ನಡ
मराठी
தமிழ்
ภาษา
ქართული
Հայերեն
ئۇيغۇرچە
Моксень
Зэбек
Cwy


TRee EDitor Default(1/6): /home/prokopis/test/events/out_test/20090406-apogevmatini-news_piravlos_voreas_koreas.pml
File Node Tree View Macros Setup Help
#10 Το πρώτο διαμέρισμα του πυραύλου έπεσε στη Θάλασσα της Ιαπωνίας και ο υπόλοιπος πύραυλος , μαζί με το δορυφόρο , συνετρίβη στον Ειρηνικό Ωκεανό .
10/13
#10 AuxS
και Coord CjCo
. AuxK PTERM_P
έπεσε Pred_Co VbMnIdPa03SgXxPeAvXx
συνετρίβη Pred_Co VbMnIdPa03SgXxPePvXx
διαμέρισμα Sb NoCmNeSgNm
στη AuxP AsPpPaFeSgAc
πύραυλος Sb NoCmMaSgNm
μαζί Adv AdXxBa
στον AuxP AsPpPaMaSgAc
Το Atr AtDfNeSgNm
πρώτο Atr NmOdNeSgNmAj
πυραύλου Atr NoCmMaSgGe
Θάλασσα IObj NoCmFeSgAc
ο Atr AtDfMaSgNm
υπόλοιπος Atr AjBaMaSgNm
. AuxX PUNCT
με AuxP AsPpSp
. AuxX PUNCT
Ειρηνικό Adv NoPrMaSgAc
του Atr AtDfMaSgGe
Ιαπωνίας Atr NoPrFeSgGe
δορυφόρο Adv NoCmMaSgAc
Ωκεανό Atr NoCmMaSgAc
της Atr AtDfFeSgGe
το Atr AtDfMaSgAc


: Global Information
languageCoding = " ISO 639-3 "
: Lexical Resource
: Lexicon
language = "eng"
: Lemma
writtenForm = "clergyman"
: Lexical Entry
partOfSpeech = "commonNoun"
: Word Form
writtenForm = "clergyman"
grammaticalNumber = "singular"
: Word Form
writtenForm = "clergymen"
grammaticalNumber = "plural"

A
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The ELRC initiative

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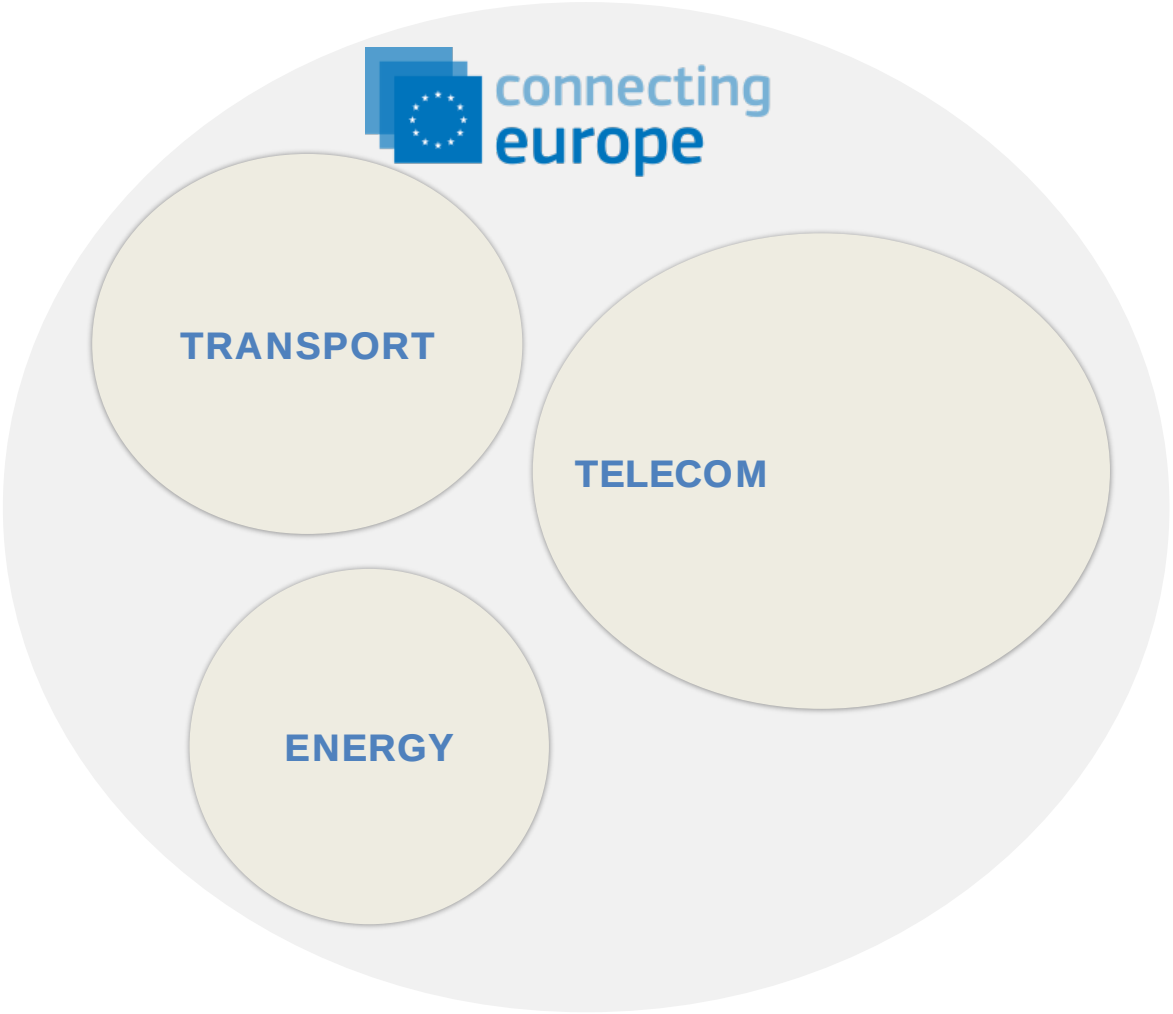
The ELRC context



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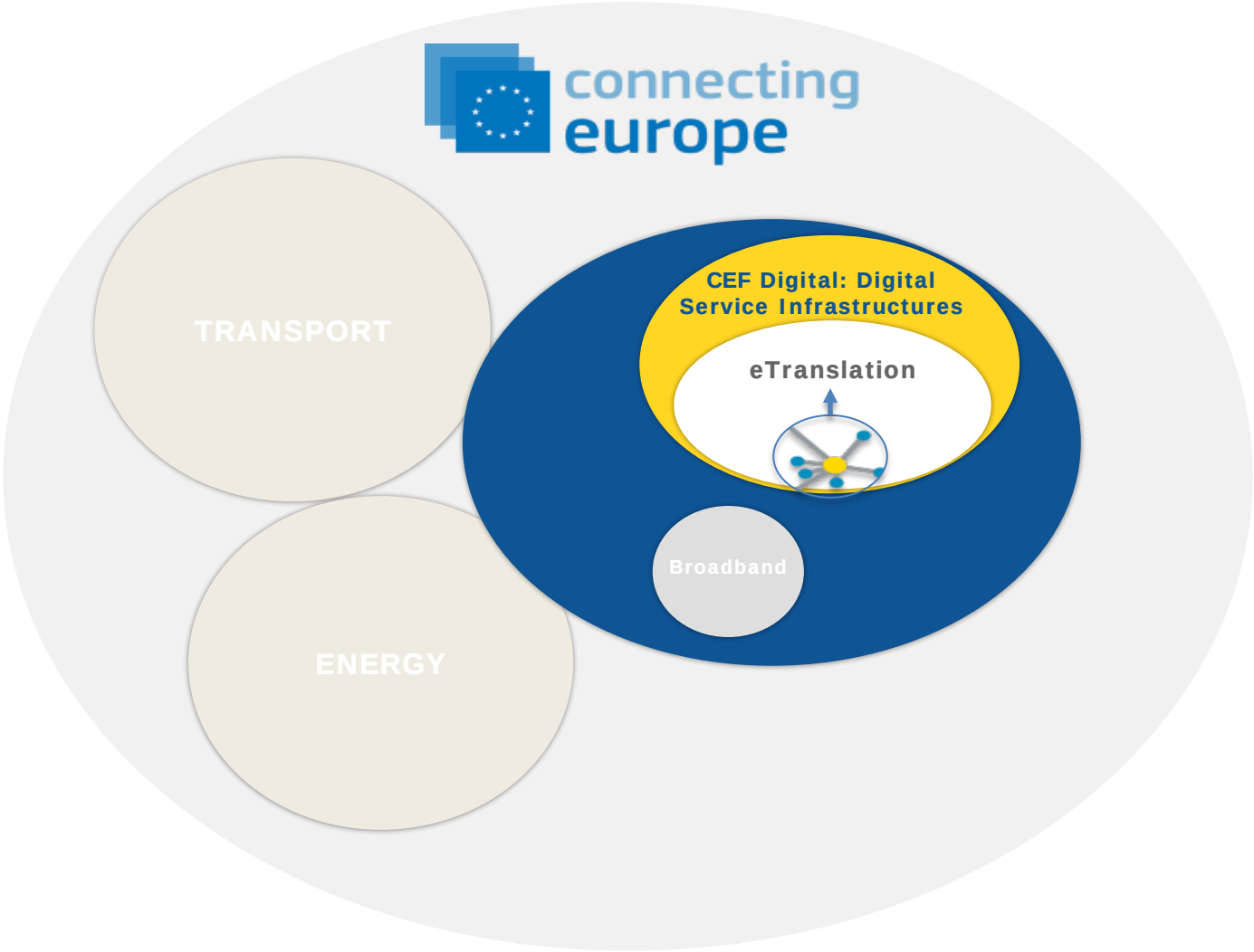
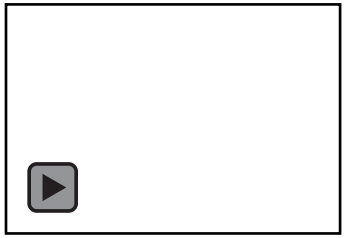
The ELRC context

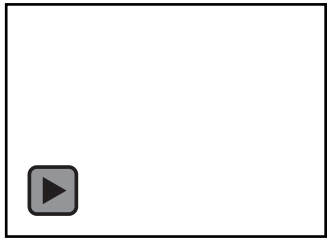


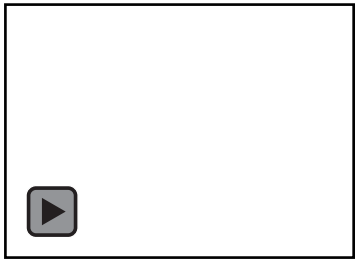
Heads & organisations behind the ELRC

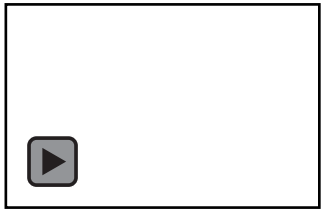
- The ELRC Consortium:

German Research Center for Artificial Intelligence









Heads & organisations behind the ELRC

- 30 ELRC Technological National Anchor Points
- 30 ELRC Public Services National Anchor Points

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What does ELRC do?

Collect	• Language resources
Identify	• Needs of public services
Engage	• With the public sector in the identification of LR
Help	• With any technical or legal issues
Act	• Observatory for language resources across Europe

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Why ELRC…?

- To facilitate multilingual communication and exchange of information in key public service scenarios
- How? With the right language resources!
- Examples of public services scenarios to which eTranslation may be applied:
  - Consumer Rights (ODR),
  - Social Security (EESSI),
  - Justice (eJustice),
  - Commerce (BRIS),
  - Open Data (EDP),
  - …

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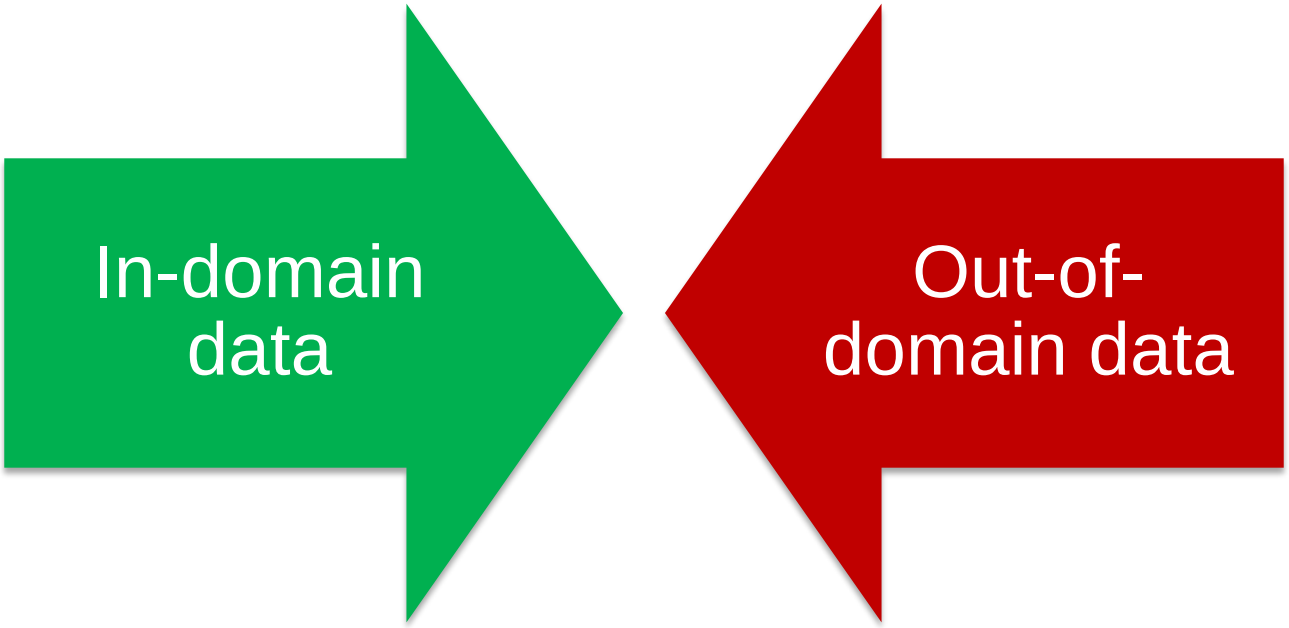
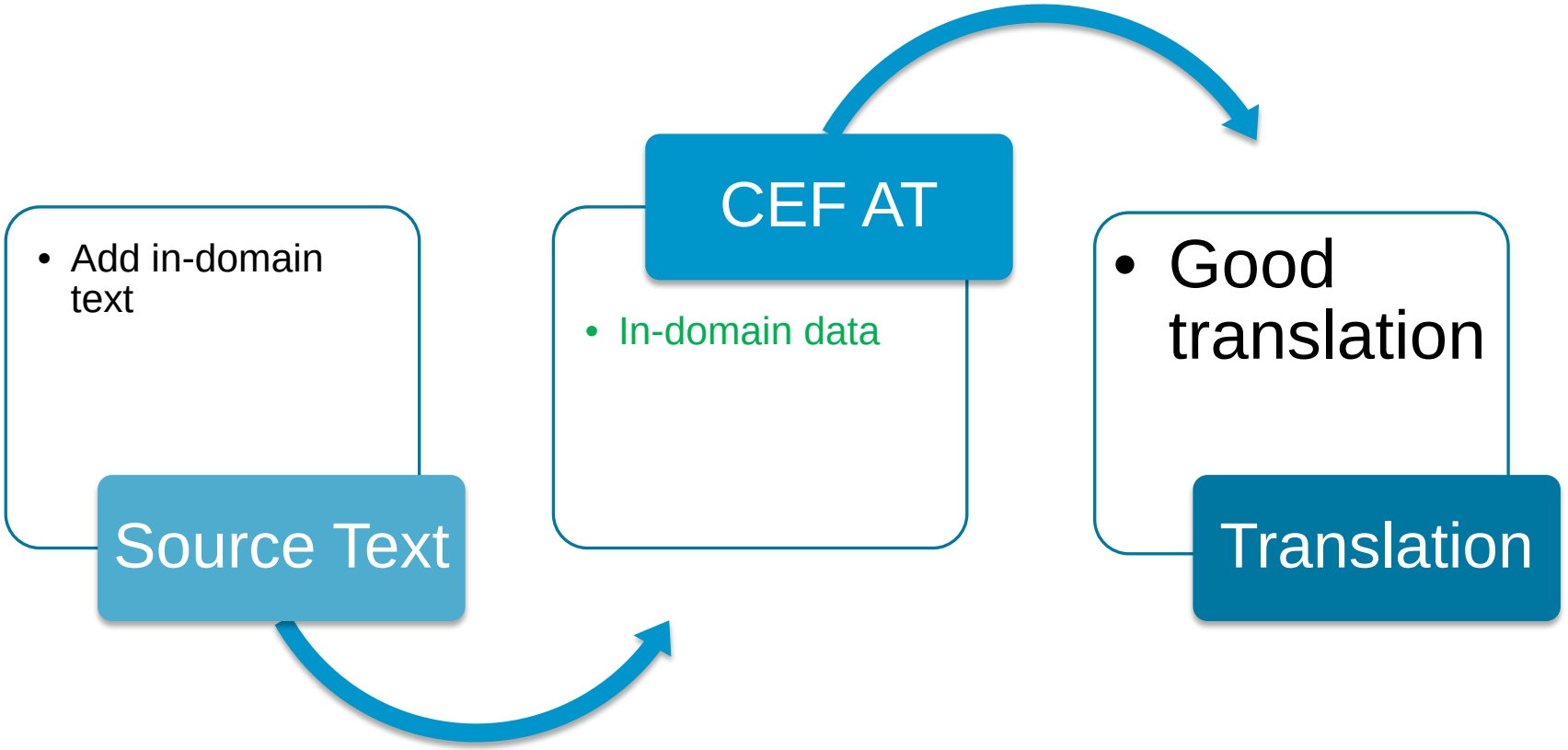
How to make it work…?



➔ **language resources of the public sector make a difference!**

How to make it work…?



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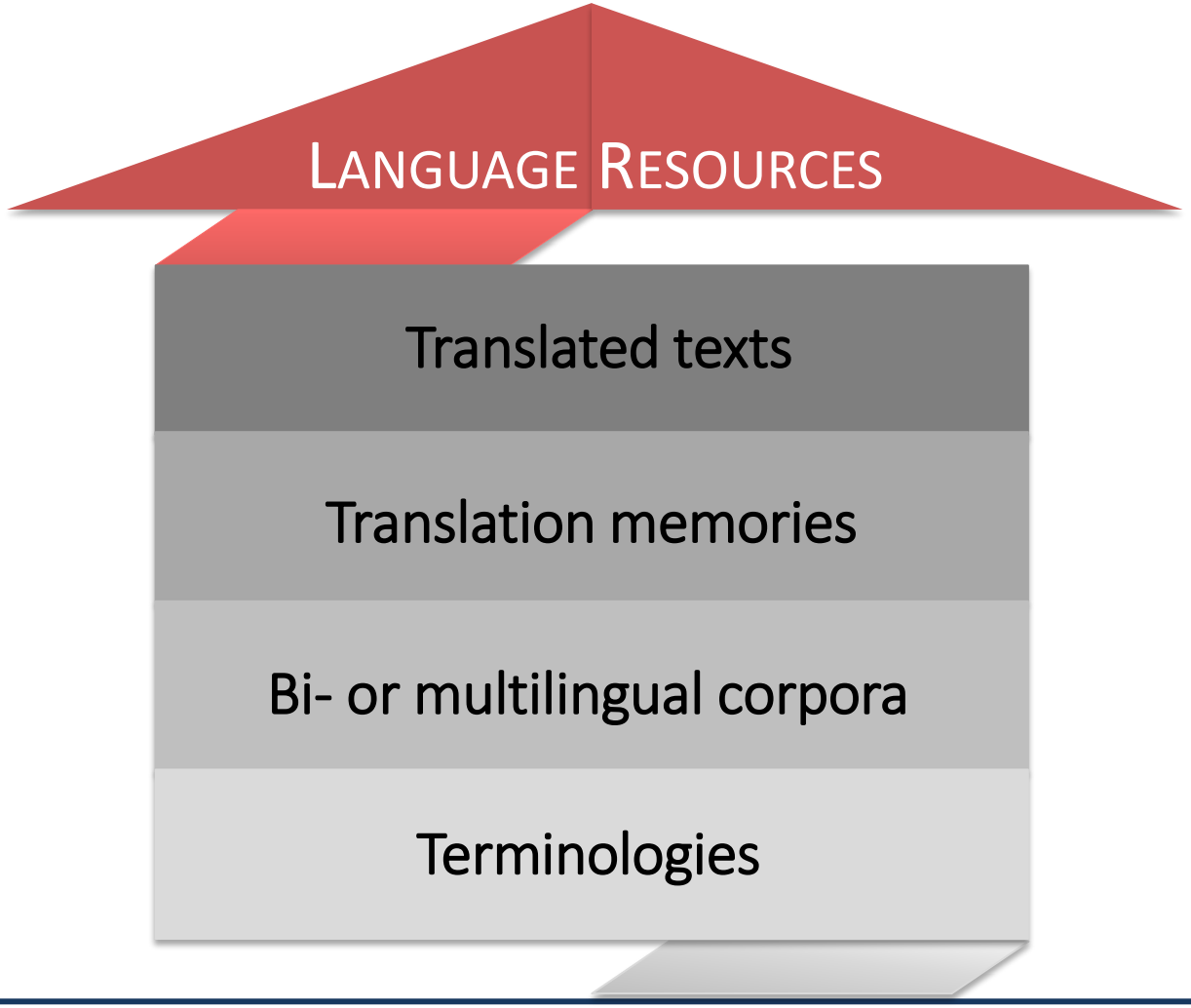
Language Resources of interest



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What has been achieved so far…?

Collection of 225 language resources overall

More than 2 billion words in all EU official languages, Norwegian and Icelandic

More than 91 language resources to be used by you!

Over 450.000 terms

More than 2 million translation units

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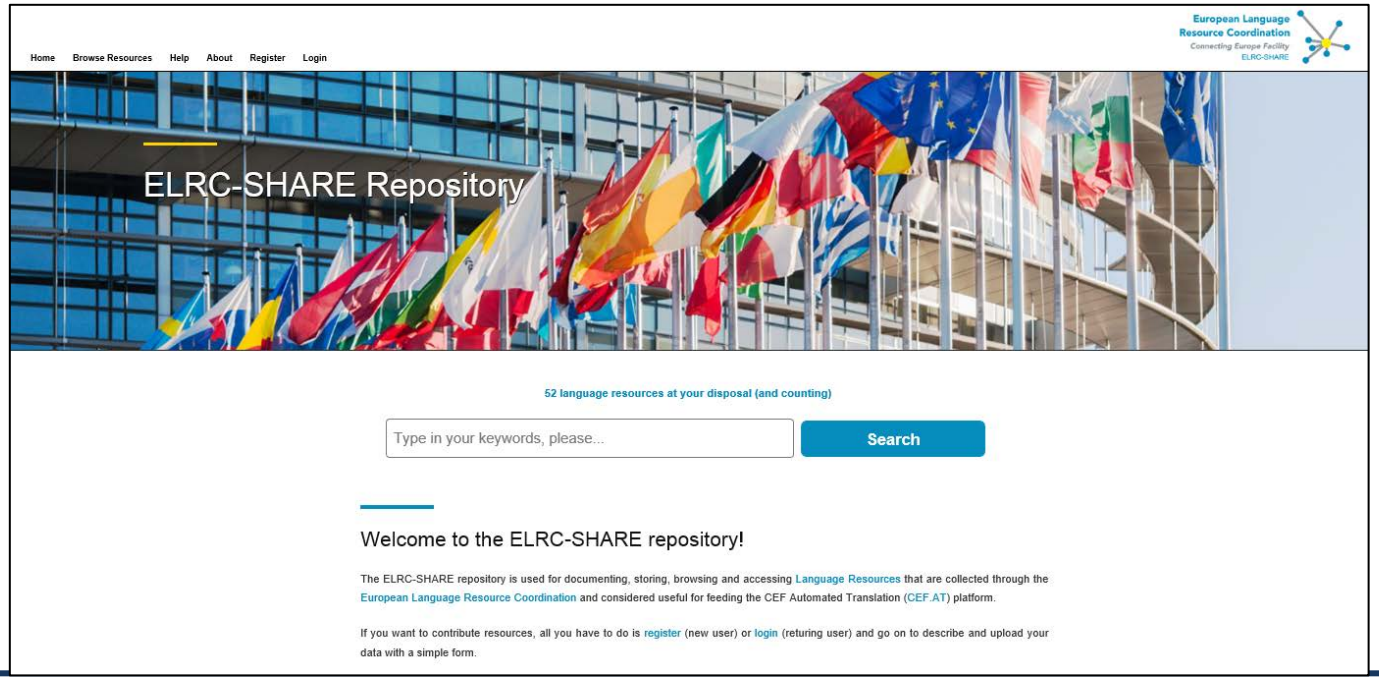
Legal Framework

- Public Sector Information (PSI) Directive 2013/37/EU
  - Amending Directive 2003/98/EC
  - Emphasis on open data
  - Clear cost rules
  - Including Cultural Institutions (Museums, Libraries and Archives) within the scope of the Directive
  - Introduce a clear regime for exclusive agreements
  - Emphasis on standard and machine readable licences

ELRC for you…

- **The ELRC-SHARE Repository**
  - Access to, sharing and contribution of language resources
  - Access to tools and services catalogue (upcoming)
  - Visit https://elrc-share.eu



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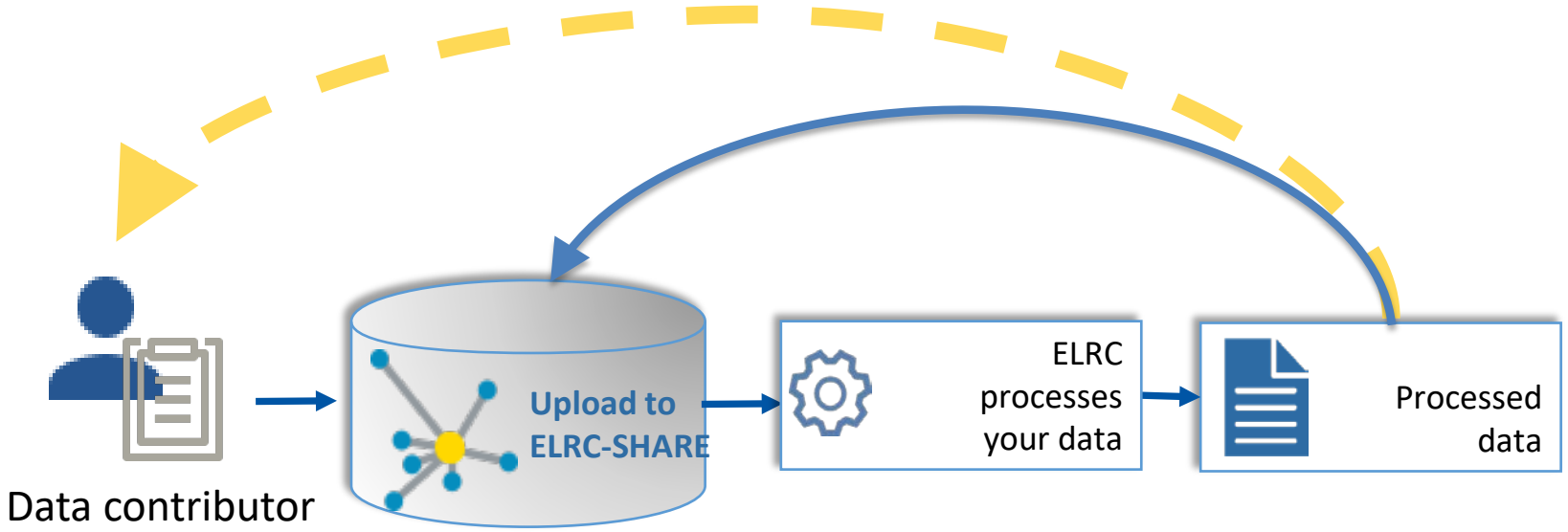
What happens to your data?



Data processing before delivery to EC

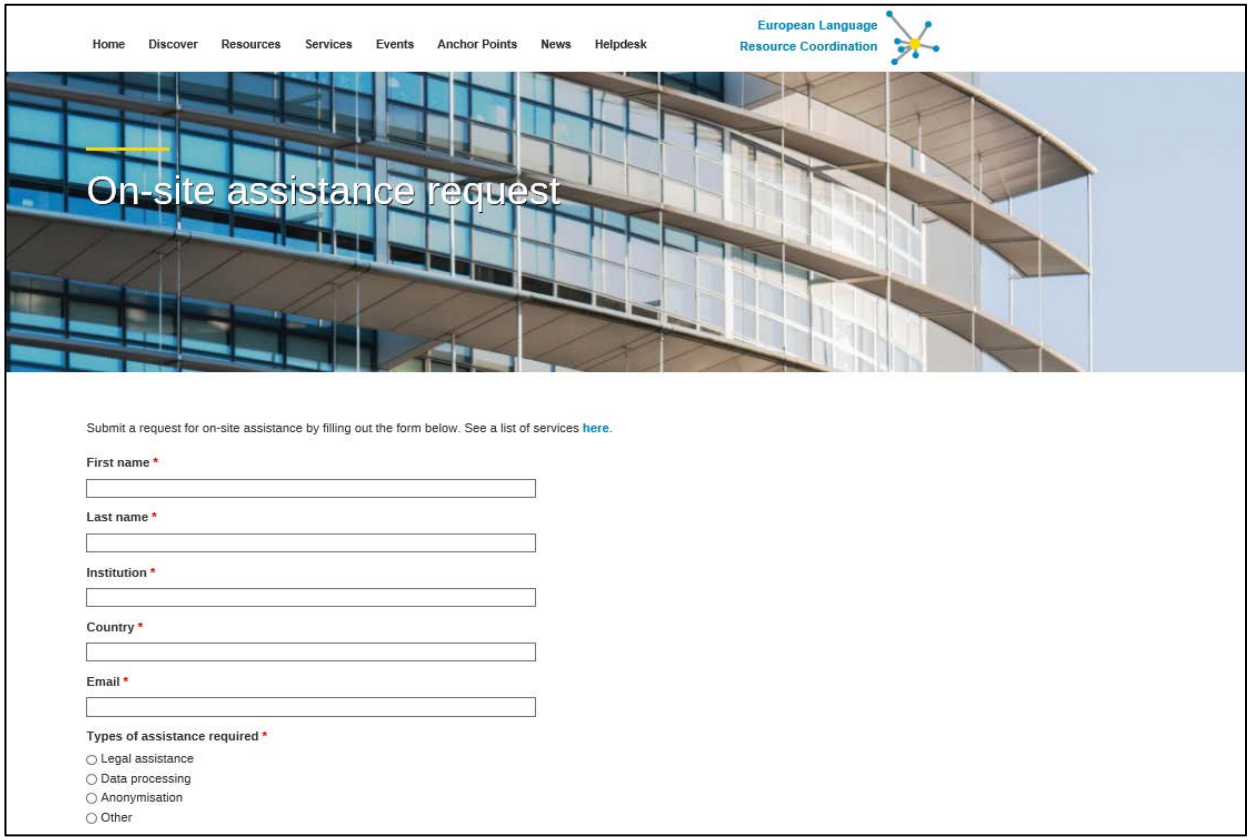
- All datasets are processed to result in tmx/tbx/txt files
- Data will indicatively undergo the following processing:
  - cleaning
  - format conversion
  - sentence alignment
  - metadata completion

ELRC for you…

- **ELRC Technical and Legal Helpdesk**
  - Continuous support for potential data donors (phone, email, …)
  - Accessible online via http://www.lr-coordination.eu/helpdesk

ELRC for you…

- **ELRC On-site assistance**
  - Submit request online at http://www.lr-coordination.eu/services



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Thank you for your attention!

Email: info@lr-coordination.eu
Website: www.lr-coordination.eu