



# Language Resource Board

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# MULTILINGUALISM IN MFF



**in Horizon Europe**



**in Digital Europe Programme**

**STATE OF THE ART TECHNOLOGY**

**R&I priorities + DATA & Infrastructure to support R&I**

## RESEARCH & INNOVATION

- **Cultural Heritage:**  
*Support Language Preservation*
- **Next Generation Internet:**  
*Support research to achieve digital language transparency*

## CAPACITY BUILDING

- *Artificial Intelligence – Natural Language Processing Tools & Resources*

## DEPLOYMENT & BEST USAGE

- *Support public administrations and areas of public interest*
- *Support deployment of Language Technologies*

# MULTILINGUALISM IN MFF



## in Horizon Europe

### Support Language Preservation

*Why: Most European languages are at risk of digital extinction*

*How: Collect language resources*

*Impact: Digital Humanities and Language Technologies*

*Where ?*

*Inclusive and Secure Society*

*Cultural Heritage*

# MULTILINGUALISM IN MFF



## in Horizon Europe

**Support research to achieve digital language transparency**

*Why: EU competitiveness and independence to external technology providers*

*How: Innovate in Language Technologies*

*Impact: keep EU Researchers Lower barriers in DSM*

**Where ?**

**Next Generation Internet  
Human-centric**

**Human-centric Internet  
applications**



# MULTILINGUALISM IN MFF



## in Digital Europe Programme

### ***Support deployment of Language Technologies***

*Why: Increase EU competition in a key technology*

*How: Provide languages data and tools to public and private and foster collaboration*

*Impact: Public and Private including SMEs*

***Where ?***

***Artificial Intelligence***

***European Data spaces,  
European libraries of algorithms  
Digital Innovation Hubs***

# MULTILINGUALISM IN MFF



## in Digital Europe Programme

***Support the modernisation of public administrations and areas of public interest***

*Why: offer EU citizen access to information in any language*

*How: Provide languages technologies enablers*

*Impact: Public administrations, Areas of public interest, SMEs.*

***Where ?***

***Deployment, best use of digital capacities and Interoperability***

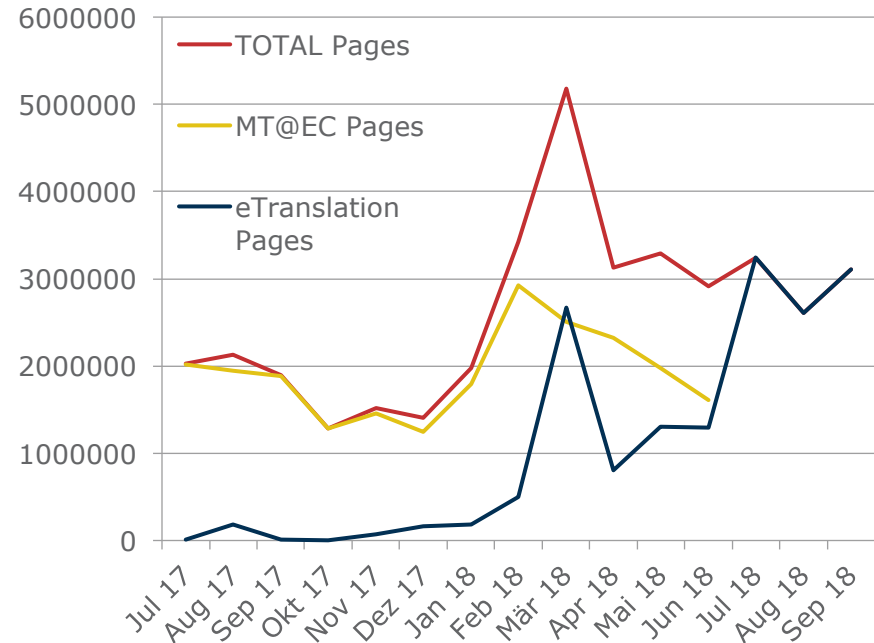
***Modernisation of administrations***

# eTranslation – Statistics

- Neural Machine Translation in the 24 official languages of the EU (24<->24)
- Secured & scalable
- Domain specific engines:
  - *Public health, culture, banking, IP Law, Case law, ... (not yet all 24<->24)*
- 51 digital services connected
- Translation volume:
  - 19 Mio pages in 2017
  - 40 Mio pages in 2018
- Latest daily record:

*19/03/19: 635 158 translated pages*

*20/03/19: 311 078 requests*

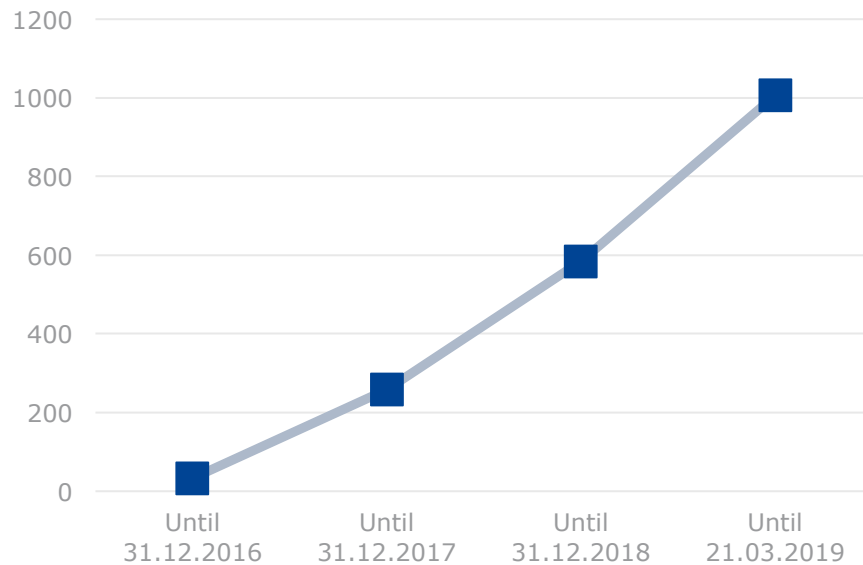


**Now available to public administrations  
across Europe**

# European Language Resource Coordination

> *1000 language resources*  
> **3 billion words**

No. of unique LR collected through ELRC-SHARE

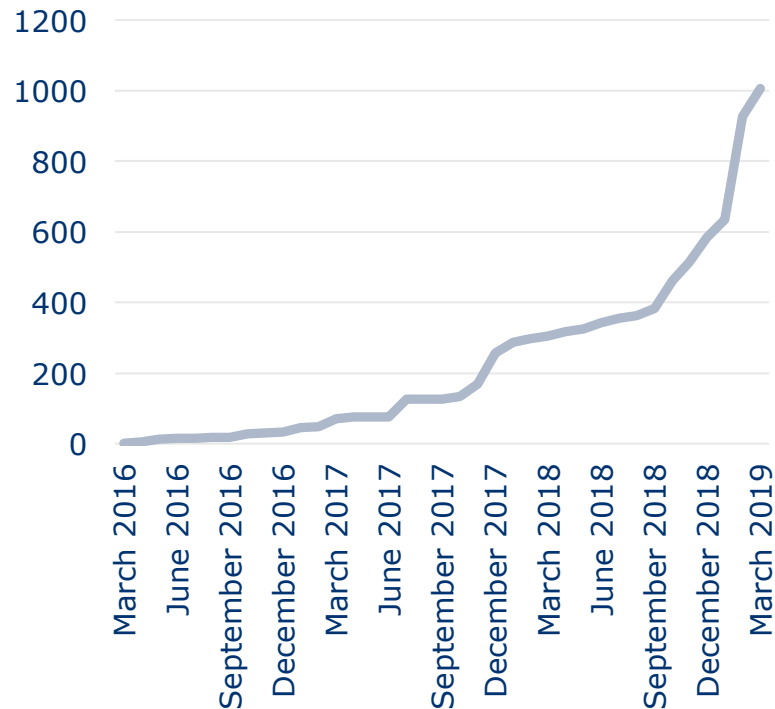




## LR collected within ELRC...

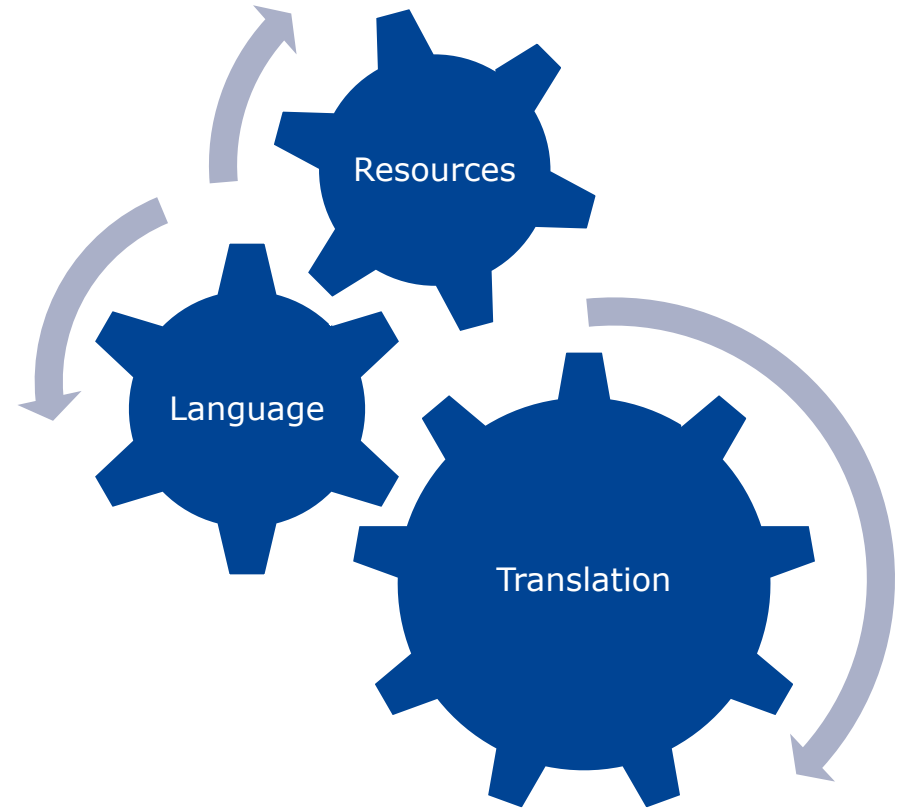
- were the main prerequisite for building EN<>IS and EN<>NB engines
- were used with a subset of EC data to build the new cultural domain DE engine
- contributed to the development of the EN<>GA engine (increase of BLEU scores)
- contributed to the development of the EUIPO engine
- are currently used for building engines for the WMT19 (EN<>DE, EN>LT and FR>DE)
- will be used for building general engines
- will be used by various other NLP tools (summarisation etc.)

No. of unique LR collected through ELRC-SHARE by month



## Requirements to build a Translation Model.

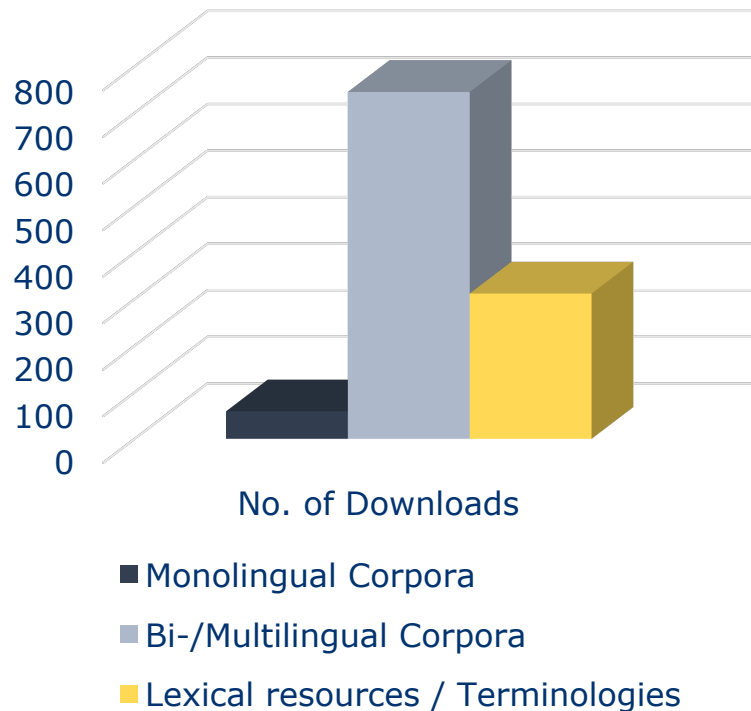
- A minimum of 2.000.000 TUs is needed to build translation engine
- At least 100.000 TUs are needed for domain adaptation (i.e. to improve the engine in a particular domain)



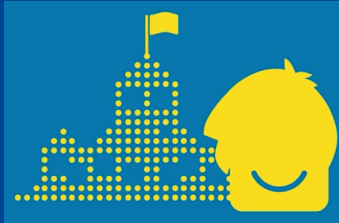
## Thank you!

- LR are key for achieving high-quality output in MT in all EU languages
- They will also be indispensable input for other NLP tools in the future

## No. of downloads of LRs by type



# CEF Telecom 2019 call for proposals



- Overall Budget: €4 million
- Indicative grants of €200,000 to €800,000 (5-20 projects)
- Co-funding: 75% of eligible costs
- Indicative duration: 2 years
- Deadline for submission: 14 May 2019



# Three Priorities

1. Collect language resources
2. Collect language tools
3. Integrate and/or complement eTranslation into
  - CEF DSIs,
  - pan-European digital public services or
  - **Public administrations**



**Freely and openly available**

**Sustainable**

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# Conditions for participation

- Consortia must be composed of
  - at least **two public or private entities**,
  - based in **two or more Member States** and/or EEA countries participating in CEF Telecom program (EU, Norway, Iceland)
- Proposal should address at least **two languages**
- Consortia members need prior Member State/EEA country agreement



**No research**

# Links & contacts:



CEF Call website:

<https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/apply-funding/2019-automated-translation>

eTranslation website:

<http://ec.europa.eu/cefdigital/etranslation>

eTranslation tool:

<https://webgate.ec.europa.eu/etranslation>

[CNECT-LANGTECH@ec.europa.eu](mailto:CNECT-LANGTECH@ec.europa.eu)

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# In a nutshell

- Help us spread the word ...  
...in all official languages

**Identify,**

**Share,**

**Benefit!**

***Now available to public administrations  
across Europe***

***Thank you!***

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## Contact us



CNECT-LANGTECH@ec.europa.eu

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