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EUROPEAN
LANGUAGE
EQUALITY

A World
Leading SFI
Research
Centre



The European Language Equality Project

Prof. Andy Way, project coordinator

ADAPT Centre, School of Computing, DCU,
Dublin

*Presented by Jan Hajič, Charles University, Prague,
META-NET Chair*

Czech-Slovak ELG NCC Workshop, online, Mon 18th October, 2021



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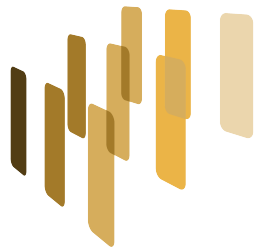


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**EUROPEAN
LANGUAGE
EQUALITY**



**EUROPEAN
LANGUAGE
GRID**

Consortium: 52 partners from all over Europe

Coordinator: ADAPT Centre (DCU)

Objective: *development of a strategic research, innovation and deployment agenda and a roadmap to achieve digital language equality in Europe by 2030*

Runtime: 18 months – ELE and ELG will both end in June 2022

Start Date: **1st January 2021**



EP Resolution “Language equality in the digital age”
P8_TA(2018)0332 – partially based on the STOA study

Voting (11 Sept. 2018): **592 yes** – 45 no

Selected Recommendations addressed by ELE:

25. Establish a large-scale, long-term coordinated funding programme for research, development and innovation in the field of language technologies, at European, national and regional levels, tailored specifically to Europe’s needs and demands

29. Create a European LT platform for sharing of services

27. Europe has to secure its leadership in language-centric AI



European Parliament
2014-2019

TEXTS ADOPTED
Provisional edition

P8_TA-PROV(2018)0332
Language equality in the digital age
European Parliament resolution of 11 September 2018 on language equality in the digital age (2018/2028(INI))

The European Parliament,

- having regard to Articles 2 and 3(3) of the Treaty on the Functioning of the European Union (TFEU),
- having regard to Articles 21(1) and 22 of the Charter of Fundamental Rights of the European Union,
- having regard to the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage,
- having regard to Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information¹,
- having regard to Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information²,
- having regard to Decision (EU) 2015/2240 of the European Parliament and of the Council of 25 November 2015 establishing a programme on interoperability solutions and common frameworks for European public administrations, businesses and citizens (ISA2 programme) as a means for modernising the public sector³,
- having regard to the Council resolution of 21 November 2008 on a European strategy for multilingualism (2008/C 320/01)⁴,
- having regard to the Council decision of 3 December 2013 establishing the specific programme implementing Horizon 2020 – the Framework Programme for Research and

¹ OJ L 345, 31.12.2003, p. 90.
² OJ L 175, 27.6.2013, p. 1.
³ OJ L 318, 4.12.2015, p. 1.
⁴ OJ C 320, 16.12.2008, p. 1.

European Language Equality: Roots



T4ME

META FORUM 2010

META-NET

T4ME
EU-funded project (Seventh Framework Programme) working on technologies for the Multilingual European Information Society

META-NET
Established in 2010, META-NET is a network of Excellence consisting of 60 research centres from 34 countries, building the technological foundations of a multilingual European information society

META-FORUM 2010
"Challenges for Multilingual Europe"
(November 17/18, 2010)



META SHARE

META FORUM 2012

META-FORUM 2012
Conference "A Strategy for Multilingual Europe"
(Brussels – June 20/21, 2012)

META-NET White Papers
Release of 32 volumes on 31 languages, revealing that there is a severe threat of digital extinction for at least 21 European languages
(December 2012)

META FORUM 2015

CRACKER
EU-funded project CRACKER (Horizon2020) pushing towards an improvement of MT research in terms of efficiency and effectiveness (2015 – 2017)

Cracking the Language Barrier Federation
Founded in 2015, the federation has been assembling European research and innovation projects as well as all related community organisations working on multilingual technologies

META-FORUM 2015
Conference "Technologies for the Multilingual Digital Single Market" (Riga – April 27, 2015)

Strategic Agenda for the Multilingual Digital Single Market (Version 0.5)
Launch of the Strategic Agenda for the Multilingual Digital Single Market titled "Technologies for Overcoming Language Barriers towards a truly integrated European Online Market" (April 2015)

Riga Summit on the Multilingual Digital Single Market
Summit "Shape the future of the multilingual digital single market" (April 27–29, 2015)



META FORUM 2017

"Language Equality in the Digital Age"
Workshop on "Language Equality in the Digital Age", commissioned by the EU Parliament's Science and Technology Options Assessment Committee (STOA) (January 2017)

"Language equality in the digital age: Towards a Human Language Project"
Launch of the study on "Language equality in the digital age: Towards a Human Language Project", commissioned by the EU Parliament (March 2017)

META-FORUM 2017
Conference "Towards a Human Language Project" (Brussels – November 13/14, 2017)

Strategic Research and Innovation Agenda (V1.0)
Launch of the Strategic Research and Innovation Agenda titled "Language Technologies for Multilingual Europe – Towards a Human Language Project" (December 2017)



AI4EU



2010

2011

2013

2015

2017

2012

2014

2016

2018

META-NORD

META-NORD
EU-funded (ICT PSP) Project to establish an open linguistic infrastructure in the Baltic and Nordic countries (2011 – 2013)

METANET4U

METANET4U
EU-funded project (ICT Policy Support Programme) to enhance the European Linguistic Infrastructure (2011 – 2013)



CESAR
EU-funded project (ICT Policy Support Programme) functioning as a part of META-NET to standardise language resources and tools (2011 – 2013)

META-FORUM 2011
Conference "Solutions for Multilingual Europe" (Budapest – June 27/28, 2011)

META-SHARE
Initiated in 2013, META-SHARE has functioned as an open and secure network of repositories for sharing and exchanging language data, tools and services

Strategic Research Agenda for Multilingual Europe 2020
Launch of the Strategic Research Agenda for Multilingual Europe 2020 (January 2013)

META-FORUM 2013
Conference "Connecting Europe for New Horizons" (Berlin – September 19/20, 2013)

"State of the Art of Machine Translation – Current Challenges and Future Opportunities"
Workshop on "State of the Art of Machine Translation", commissioned by the EU Parliament (December 2013)

Strategic Research and Innovation Agenda (Version 0.9)
Launch of the Strategic Research and Innovation Agenda titled "Language as a Data Type and Key Challenge for Big Data" (July 2016)

META-FORUM 2016
Conference "Beyond Multilingual Europe" (Lisbon – July 4/5, 2016)



ELG Final Proposal Submission
Final submission on Feb. 20, 2018



2019-2021



META FORUM 2011

META FORUM 2013

META FORUM 2016



ELG consortium





Draw up sustainable evidence-based **strategic research agenda** and **roadmap** setting out actions, processes, tools and actors to achieve full **digital language equality** of all languages (official or otherwise) used within the EU through the effective use of **Language Technology**.

1. Agenda

From current state of Language Technology to Digital Language Equality

2. Roadmap

Provide path for implementing the agenda by 2030

3. **Dissemination:** events, consultations, social media etc.



- Development of the strategy and roadmap
- Input from all stakeholders
- Close collaboration with stakeholders
 - Integrating research and practice
 - Making research and practice more relevant
- Update and review
- Organising a series of events
- Large, all-encompassing consultation with industry, research and many networks, initiatives and associations

ELE is *not* about implementation or research.

Rather, it is a preparation project to develop a convincing agenda and roadmap, endorsed by as many relevant stakeholders as possible, representing the whole field





<https://european-language-equality.eu/>



About Strategic Agenda Deliverables Events News Consortium Contact



About European Language Equality

Twenty-four official languages and more than 60 regional and minority languages constitute the fabric of the EU's linguistic landscape. However, language barriers still hamper communication and the free flow of information across the EU. Multilingualism is a key cultural cornerstone of Europe and signifies what it means to be and to feel European. Many studies and resolutions, as noted in the recent EP resolution "Language equality in the digital age", have found a striking imbalance in terms of support through language technologies and issue a call to action.

This project answers this call and lays the foundations for a strategic agenda and roadmap for making digital language equality a reality in Europe by 2030.



language equality in Europe by 2030. This programme will be prepared jointly with the whole European Language Technology, Computational Linguistics and language-centric AI community, as well as with representatives of relevant initiatives and associations, language communities and RML groups.

The primary goal of ELE is to prepare the European Language Equality Programme, in the form of a strategic research, innovation and implementation agenda and a roadmap for achieving full digital

The consortium includes all relevant scientific and industrial stakeholders from all Member States and Associated Countries and engages them in the process. The whole community is included in the project through external consultation sessions. The project plan is fully optimised towards this key goal of preparing the strategic agenda and roadmap and of involving the whole European LT community.

Ensuring appropriate technology support for all European languages will create jobs, growth and opportunities in the digital single market. Equally crucial, overcoming language barriers in the digital environment is essential for an inclusive society and for providing unity in diversity for many years to come. The ELE project provides a roadmap and framework to achieve this.



EU Survey

Pages: **Start** | Introduction | Language coverage | Current situation | Future situation



EUROPEAN LANGUAGE EQUALITY

About this questionnaire

This questionnaire is delivered by the [European Language Equality \(ELE\)](#) project, a pilot action that addresses an appeal by the European Parliament resolution "[Language equality in the digital age](#)". The primary goal of ELE is to prepare a Strategic Research and Innovation Agenda and Roadmap, in order to tackle the striking imbalance between European languages in terms of the support they receive through **language technologies**.

To this end, ELE is reaching out to the European stakeholders involved in Digital Language Equality through a series of consultation rounds. This questionnaire is specifically addressed to **researchers and industry practitioners in the field of Language Technology (LT), Natural Language Processing (NLP), Speech Technologies and Language-centric AI**.

The questionnaire takes approximately 20 minutes to fill in. You are requested to evaluate the current situation with respect to the level of LT support for European languages, to indicate challenges and to share your needs and expectations for the future.

Your contributions will be carefully taken into account when preparing the ELE strategic agenda and roadmap.

This is a joint pan-European effort that will impact the field of LT in Europe for the next 10-15 years, including the funding situation. Join us and be a part of it!

Personal data protection

Personal data, i.e. name and email address, will be used **for contact purposes only** during the ELE project, i.e. to invite respondents to follow-up interviews or to the ELE conference or other project events. No personal data of the respondents will be made available to any third-party, beyond the ELE consortium. The names and emails of the respondents will not be reported in any project public document. The respondents' views and opinions, as expressed through this questionnaire, may be reported **anonymously** in the project's deliverables or in other public documents, e.g. scientific publications, dissemination material etc., without any reference to the individual's personally identifiable information.

EU Survey


2 Language coverage

* What languages does your organisation conduct research in and/ or for what languages do you offer services, software, resources, models etc.?

- | | | |
|---|--|-------------------------------------|
| <input type="checkbox"/> Basque | <input type="checkbox"/> Galician | <input type="checkbox"/> Norwegian |
| <input type="checkbox"/> Bulgarian | <input type="checkbox"/> German | <input type="checkbox"/> Polish |
| <input type="checkbox"/> Catalan; Valencian | <input type="checkbox"/> Greek | <input type="checkbox"/> Portuguese |
| <input type="checkbox"/> Croatian | <input type="checkbox"/> Hungarian | <input type="checkbox"/> Romanian |
| <input type="checkbox"/> Czech | <input type="checkbox"/> Icelandic | <input type="checkbox"/> Serbian |
| <input type="checkbox"/> Danish | <input type="checkbox"/> Irish | <input type="checkbox"/> Slovak |
| <input type="checkbox"/> Dutch | <input type="checkbox"/> Italian | <input type="checkbox"/> Slovenian |
| <input type="checkbox"/> English | <input type="checkbox"/> Latvian | <input type="checkbox"/> Spanish |
| <input type="checkbox"/> Estonian | <input type="checkbox"/> Lithuanian | <input type="checkbox"/> Swedish |
| <input type="checkbox"/> Finnish | <input type="checkbox"/> Luxembourgish | <input type="checkbox"/> Welsh |
| <input type="checkbox"/> French | <input type="checkbox"/> Maltese | <input type="checkbox"/> Other |

Are there any languages that your organisation does not yet support, but you plan to support in the next three years?

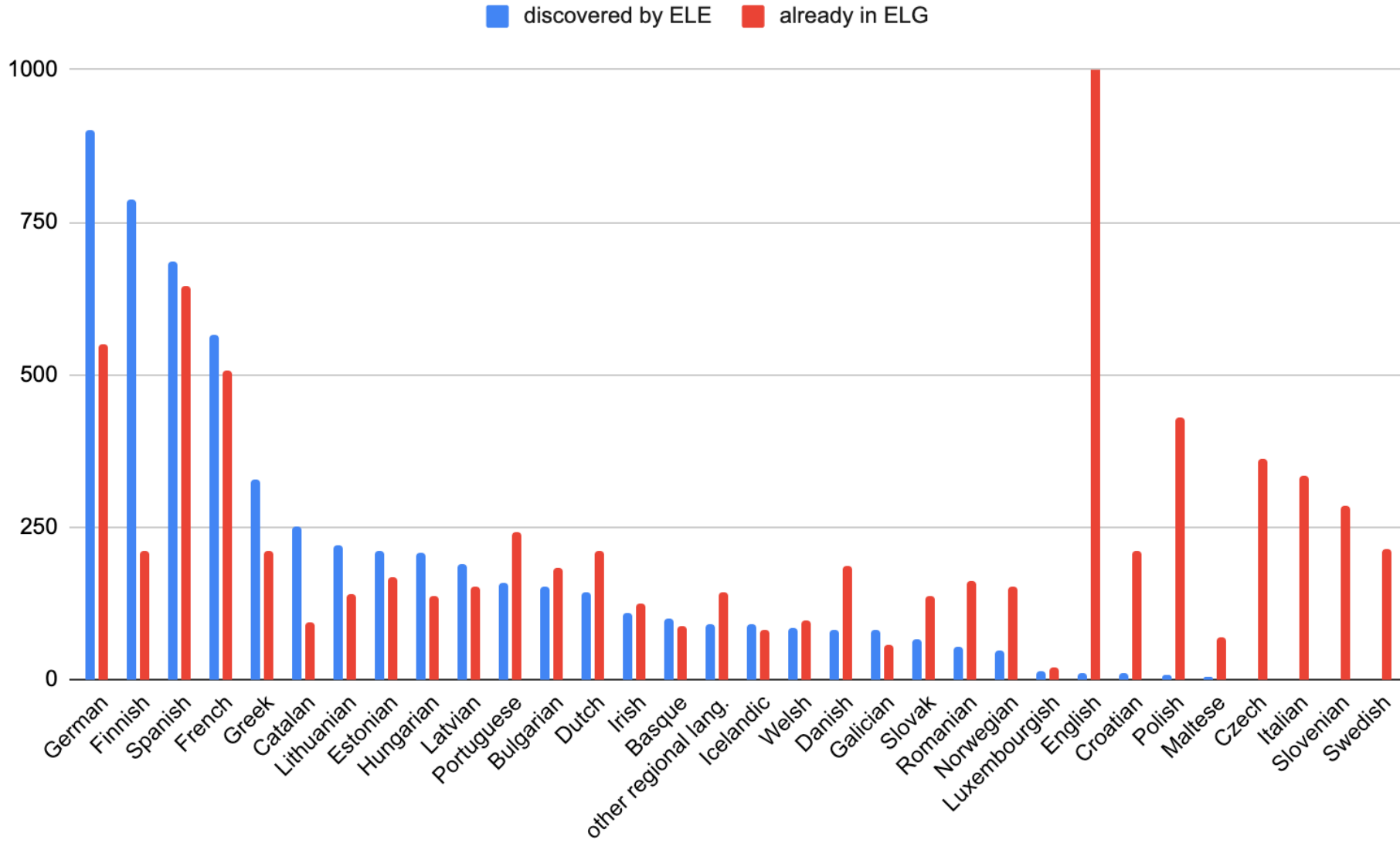
- | | | |
|---|--|-------------------------------------|
| <input type="checkbox"/> Basque | <input type="checkbox"/> Galician | <input type="checkbox"/> Norwegian |
| <input type="checkbox"/> Bulgarian | <input type="checkbox"/> German | <input type="checkbox"/> Polish |
| <input type="checkbox"/> Catalan; Valencian | <input type="checkbox"/> Greek | <input type="checkbox"/> Portuguese |
| <input type="checkbox"/> Croatian | <input type="checkbox"/> Hungarian | <input type="checkbox"/> Romanian |
| <input type="checkbox"/> Czech | <input type="checkbox"/> Icelandic | <input type="checkbox"/> Serbian |
| <input type="checkbox"/> Danish | <input type="checkbox"/> Irish | <input type="checkbox"/> Slovak |
| <input type="checkbox"/> Dutch | <input type="checkbox"/> Italian | <input type="checkbox"/> Slovenian |
| <input type="checkbox"/> English | <input type="checkbox"/> Latvian | <input type="checkbox"/> Spanish |
| <input type="checkbox"/> Estonian | <input type="checkbox"/> Lithuanian | <input type="checkbox"/> Swedish |
| <input type="checkbox"/> Finnish | <input type="checkbox"/> Luxembourgish | <input type="checkbox"/> Welsh |
| <input type="checkbox"/> French | <input type="checkbox"/> Maltese | <input type="checkbox"/> Other |

* Considering your development plans with respect to language coverage, what are the **top three** drivers for your decision to support additional languages? 

at most 3 choice(s)

- Market interest/demand by users or customers
- Research/scientific interest
- Available funding/investment
- Availability of human experts for other languages
- Availability of language resources
- Availability of technologies/tools
- Other

Progress To Date: LR Collection (Oct 15th)





- The ELE project, by mid-2022, ...
 - ... will develop a *Strategic Research, Innovation and Implementation Agenda and a Roadmap for achieving full Digital Language Equality in Europe by 2030*
 - as a consortium of 52 partners covering all European countries and all major initiatives
 - ... organize consultation events, roundtables, stakeholder meetings
 - ... collaborate with its sister project ELG, ELG NCCs, META-NET members
 - organize a joint META-FORUM 2022 in June 2022
- ... impacting future research in all aspects of Language Technology
- Closest event: META-FORUM 2021, Nov. 15-17 (online)
 - ... more information about projects, language technology, etc.



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Thank you!



<http://www.european-language-equality.eu>