DRAFT REPORT

on language equality in the digital age
(2018/2028(INI))

Committee on Culture and Education

Rapporteur: Jill Evans

Rapporteur for the opinion (*):
Marisa Matias, Committee on Industry, Research and Energy

(*) Associated committee – Rule 54 of the Rules of Procedure
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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 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 the 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 Innovation (2014-2020) and repealing Decisions 2006/971/EC, 2006/972/EC, 2006/973/EC, 2006/974/EC and 2006/975/EC⁵,

– having regard to the Commission communication of 18 September 2008 entitled ‘Multilingualism: an asset for Europe and a shared commitment’ (COM(2008)0566),

– having regard to the Commission communication of 26 August 2010 entitled ‘A Digital Agenda for Europe’ (COM(2010)0245),


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having regard to the opinion of the European Economic and Social Committee on the communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions ‘A Digital Agenda for Europe’ (COM(2010)0245)1,

having regard to the Presidency conclusions of the Barcelona European Council of 15 and 16 March 2002 (SN 100/1/02 REV 1),

having regard to its resolution of 14 January 2004 on ‘Preserving and promoting cultural diversity: the role of the European regions and international organisations such as UNESCO and the Council of Europe’ 2, and to its resolution of 4 September 2003 on ‘European regional and lesser-used languages – the languages of minorities in the EU – in the context of enlargement and cultural diversity’3,

having regard to its resolution of 11 September 2013 on endangered European languages and linguistic diversity in the European Union4,

having regard its resolution of 7 February 2018 on protection and non-discrimination with regard to minorities in the EU Member States5,

having regard to Rule 52 of its Rules of Procedure,

having regard to the report of the Committee on Culture and Education and the opinion of the Committee on Industry, Research and Energy (A8-0000/2018),

A. whereas language technologies cover many research groups and disciplines including natural language processing, speech technology, information extraction, and machine translation;

B. whereas there are 24 official languages and more than 60 national and regional languages in the European Union; whereas multilingualism presents one of the greatest assets of cultural diversity in Europe and, at the same time, one of the most significant challenges for the creation of a truly integrated EU;

C. whereas multilingualism comes under the scope of a series of EU policy areas, including culture, lifelong learning, employment, social inclusion, competitiveness, youth, civil society, research and media; whereas more attention needs to be paid to removing barriers to intercultural and interlinguistic dialogue;

D. whereas language technologies are used in many everyday digital products and services, since most use language to some extent;

1 OJ C 54, 19.2.2011, p. 58.
4 OJ C 93, 9.3.2016, p. 52.
E. whereas fulfilling the Barcelona objective of enabling citizens to communicate well in their mother tongue plus two other languages would give people more opportunities to access culture and to participate as citizens; whereas additional means and tools, especially those provided by language technologies, are key to managing European multilingualism properly;

F. whereas the fast pace of development in language technologies offers new opportunities for digital communication in all European languages;

G. whereas the common European values of cooperation, solidarity, recognition and respect should mean that all citizens have full and equal access to new technologies, which would improve European cohesiveness and wellbeing;

H. whereas the emergence of methods such as deep learning, based on increased computational power and access to vast amounts of data, are making language technologies a real solution for overcoming language barriers;

**Current obstacles to achieving language equality in the digital age in Europe**

1. Regrets that in Europe there is currently a widening technology gap between well-resourced languages and less-resourced languages, whether the latter are official, co-official or non-official in the EU; whereas some of the latter may already be facing digital extinction;

2. Stresses that European lesser-used languages are significantly disadvantaged owing to an acute lack of tools and resources, as well as a lack of researchers with the necessary technological skills, despite the fact that speakers of these languages gain the most from language technologies;

3. Notes the deepening digital divide between widely-used and lesser-used languages, and draws attention, given the increasing digitalisation of European society, for example in public service provision, to the rights and access issues that this will lead to, particularly for the elderly and those on low incomes;

4. Notes that while Europe has a strong scientific base in language engineering and technology, the market is currently dominated by non-European actors, and that this may not be suitable for addressing the specific needs of a multilingual Europe;

5. Notes with concern that the Digital Single Market remains fragmented by significant language barriers, thus hindering online commerce, communication via social networks, and the exchange of cultural content, as well as the wider deployment of pan-European public services;

6. Notes that language technologies currently do not play a role in the European political agenda, despite the fact that respect for linguistic diversity is enshrined in the Treaties;

7. Commends the important role of previous EU-funded research networks such FLaReNet, CLARIN, HBP and META-SHARE for leading the way in the construction of a European language technology platform;
Improving the institutional framework for language technology policies at EU level

8. Recommends that in order to raise the profile of language technologies in Europe, the Commission should allocate the area of multilingualism to the portfolio of a Commissioner, given the importance of linguistic diversity for the future of Europe;

9. Encourages those Member States that have already developed their own successful policy strategies in the field of language technologies to share their experiences and good practices in order to help other national and regional authorities develop their own strategies;

10. Calls on the Commission and the Member States to define the minimum language resources, such as lexicons, speech records, translation memories, corpora and encyclopaedic contents, that all European languages should possess in order to avoid digital extinction;

Recommendations for EU research policies

11. Calls on the Commission to establish a large-scale, long-term funding programme for research and development and innovation, with a view to developing innovative technologies and services and contributing to the reduction of the technology gap between European languages;

12. Believes that specific programmes within current funding schemes such as Horizon 2020, as well as successor funding programmes, should boost long-term basic research as well as knowledge and technology transfer between countries and regions;

13. Recommends the creation of a European language technology platform with representatives from all European languages that enables the sharing of language technology-related resources;

14. Recommends the extension of the EU-funded Digital Language Diversity Project to cover research into the digital needs of all European lesser-used languages, so as to address the digital divide issue and help prepare these languages for a digital future;

15. Recommends a pan-European survey on the status of language technologies and resources for all European languages;

Education policies to improve the future of language technologies in Europe

16. Believes that owing to the current situation whereby non-European actors dominate the market in language technologies, European education policies should aim at retaining talent in Europe, should analyse the current educational needs related to language technology, and should raise awareness among schoolchildren and students of the career opportunities in the language technology industry;

17. Proposes that the Commission and Member States promote the use of language technologies within cultural and educational exchanges between European citizens such as Erasmus+, with the aim of reducing the barriers that linguistic diversity can pose to intercultural dialogue, especially in written and audiovisual expression;
18. Recommends that Member States develop digital literacy programmes and introduce language technology training and tools in the curricula of their schools, universities and vocational colleges;

**Language technologies: benefits for both private companies and public bodies**

19. Underlines the need to foster and support the development of investment instruments and accelerator programmes that aim at increasing the use of language technologies in the cultural and creative sector, especially targeting less-resourced communities and encouraging the development of language technology capacities in areas where the sector is weaker;

20. Calls on the EU institutions to raise awareness of the benefits for companies, public bodies and citizens of the availability of online services, content and products in multiple languages, including lesser-used languages, with a view to overcoming language barriers and to the preservation of the cultural heritage of language communities;

21. Calls on administrations at all levels to improve access to online services and information in different languages, and to use already existing language technology such as machine translation, speech recognition and text-to-speech, in order to improve the accessibility of those services;

22. Instructs its President to forward this resolution to the Council and the Commission.
EXPLANATORY STATEMENT

The EU is a unique endeavour involving more than 500 million citizens sharing about 80 different languages. While multilingualism is one of the biggest assets of Europe, it also poses one of the most substantial challenges for the creation of a culturally and socially integrated EU as well as an obstacle for the fulfilment of the goals of the Digital Single Market.

Language technologies are found behind many everyday digital products, since most of them use language to some extent. Mobile communications, social media, intelligent assistants, and speech-based interfaces are transforming the way citizens, companies and public administrations interact in the digital world. Furthermore, language technologies are also helpful to develop multilingual resources and content outside of the digital sphere. Despite the fact that language technologies are critical pieces of technology to aid in this digital revolution, they are not properly represented in the agendas of the European policy-makers.

Language technologies contribute to the equality of all European citizens in their everyday experiences, regardless of the languages they speak.

Although smaller or minority languages are the ones to gain most from language technologies, tools and resources for them are often scarce — in some cases non-existent. In fact, there is a widening technology gap between large, well-resourced languages and the other official, co-official or non-official EU languages, some of which might already be facing digital extinction.

In order to bridge this technology gap, policies should focus on fostering technology development for all European languages. The preservation of a language, and thus of the culture develop around it, is critically tied to its ability to function and be useful in modern and changing environments as the digital world. So, cultural and language diversity is closely linked to the capacities and resources in the digital world.

Improvements in language technologies rely mainly on the ability to access and maintain ever larger and more finely tuned linguistic data and resources. Close collaboration between research, industry, public and private data owners becomes a necessity. Moreover, regulation of the use of such data should be made much more open and core language resources (corpora, lexicons, ontologies, etc.) should be made interoperable and shared in an open environment. The framework provided by the directive on the re-use of public sector information (Directive 2003/98/EC, known as the ‘PSI Directive’) gives the opportunity for the huge amounts of data and information generated by public administrations to be used for valuable language technology resources.

In a multilingual Europe, language barriers are expected to have profound and intertwined social and economic consequences such as: (1) fostering a language divide, (2) hampering workers’ mobility, (3) hindering the access to cross-border public services, (4) limiting citizens’ engagement and participation in the political process, (5) creating fragmented markets for cross-border trade and e-commerce, particularly for SMEs and (6) restricting access to cultural and educational resources.

Furthermore, the European language technologies community acknowledges a lack of coordination between research efforts and the market of HLT applications and services. However, recent initiatives such as META-NET, Cracking the Language Barrier federation, LT-Innovate and the Connecting Europe Facility programme have done much to bring the fragmented community together.
However multilingualism in Europe is a complex topic involving many stakeholders in different countries with intertwined interests. No single policy will tackle the aforementioned problems. On the contrary, to truly seize the opportunities of a multilingual Europe, a joint and coordinated action is required at the European, national and regional levels, involving a variety of stakeholders.

Europe can become a world leader in the field of linguistic diversity and equality. The tools and methodologies built to facilitate widespread use of all European languages can be extended to the rest of the world. It should be noted that there are around 80 European languages and that there are 6000 languages worldwide, of which only about 2000 are written languages and only about 300 have a standardised version. The tools and methodologies built in Europe would be useful for at least other 200 other languages around the world.

Therefore, this report proposes different policy options that would improve language equality in Europe through using new technologies, by (1) improving the institutional frameworks for language technology policies, (2) creating new research policies to increase the use of language technology in Europe, (3) using education policies in order to secure the future of language equality in the digital age, and (4) increasing the support for both private companies and public bodies to make better use of language technologies.