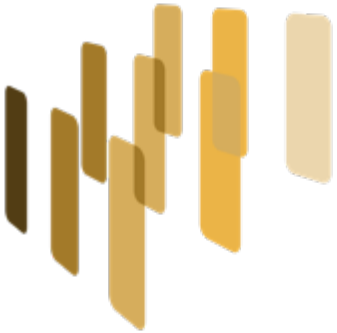


EUROPEAN LANGUAGE GRID

META NET
META FORUM 2020

META-FORUM 2020
Piloting the European Language Grid
The Second Annual ELG Conference

Georg Rehm (DFKI)
georg.rehm@dfki.de

01/02/03-12-2020 META-FORUM 2020 – Piloting the European Language Grid (virtual conference)
http://www.european-language-grid.eu

META-NET (T4ME)

CESAR

META-NORD

METANET4U

META-NET

- **60** research centres in **34** countries, founded in 2010
- Chair of Executive Board: Jan Hajic (CUNI)
- Deputies: Josef van Genabith (DFKI), Andrejs Vasiljevs (Tilde)
- General Secretary: Georg Rehm (DFKI)

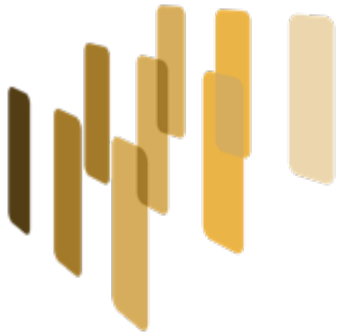
META

- Multilingual Europe Technology Alliance

Published in 2013

31 volumes, published in 2012

- **META-FORUM 2020** – December 01-03, virtual conference
  Piloting the European Language Grid
- **META-FORUM 2019** – October 08/09, Brussels, Belgium
  Introducing the European Language Grid
- **META-FORUM 2017** – November 13/14, Brussels, Belgium
  Towards a Human Language Project
- **META-FORUM 2016** – July 04/05, Lisbon, Portugal
  Beyond Multilingual Europe
- **META-FORUM 2015** – April 27, Riga, Latvia
  Technologies for the Multilingual Digital Single Market
- **META-FORUM 2013** – September 19/20, Berlin, Germany
  Connecting Europe for New Horizons
- **META-FORUM 2012** – June 20/21, Brussels, Belgium
  A Strategy for Multilingual Europe
- **META-FORUM 2011** – June 27/28, Budapest, Hungary
  Solutions for Multilingual Europe
- **META-FORUM 2010** – November 17/18, Brussels, Belgium
  Challenges for Multilingual Europe



EUROPEAN LANGUAGE GRID

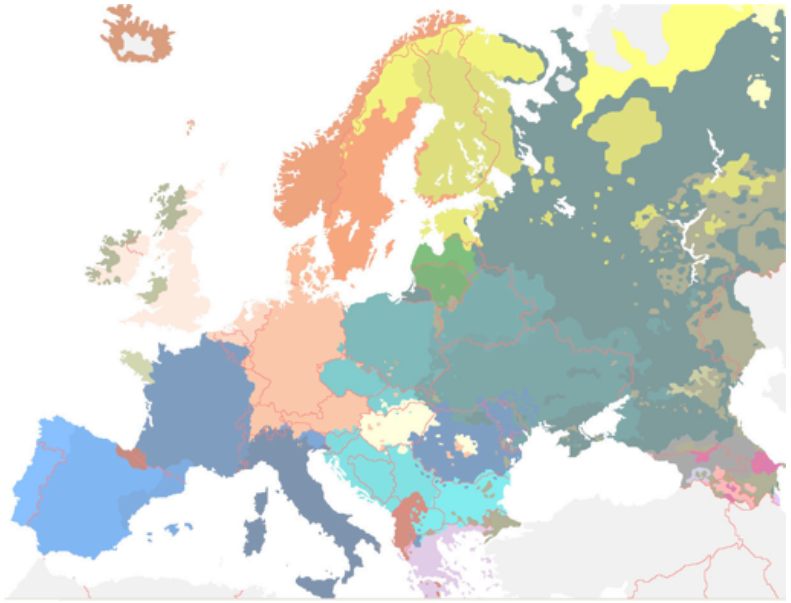
META-FORUM 2020: Second Annual ELG Conference
Piloting the European Language Grid

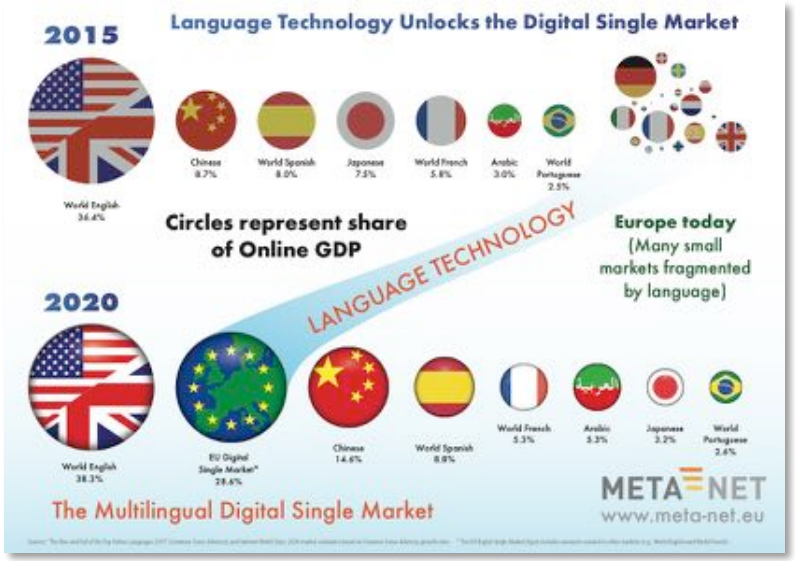
META NET
META FORUM 2020

➔ Poll: Is this your first META-FORUM?

Multilingualism in Europe

- Multilingualism is at the heart of the European idea
- 24 EU languages – they all have the same status
- Dozens of regional and minority languages as well as languages of immigrants and trade partners
- Many economic, social and technical challenges:
  - The Digital Single Market needs to be multilingual
  - Cross-border, cross-lingual, cross-cultural communication
  - Fragmentation of the LT market and landscape (including availability of LTs and LRs)





META FORUM 2010

META SHARE

META FORUM 2015

MULTILINGUAL DIGITAL SINGLE MARKET Riga Summit 2015

META FORUM 2017

AI4EU

META FORUM 2019

T4ME

META NET

META FORUM 2012

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-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)

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)

"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)

EUROPEAN LANGUAGE EQUALITY
2021-2022

EUROPEAN LANGUAGE GRID
2019-2022

2010 2011 2012 2013 2014 2015 2016 2017 2018

META NORD

METANET4U

CESAR
CEntral and South-east europeAn Resources

META FORUM 2011

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

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

CESAR
EU-funded project (ICT PSP) 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)

"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)

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)

META FORUM 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)

CRACKER Cracking the Language Barrier

Cracking the Language Barrier

META FORUM 2016

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

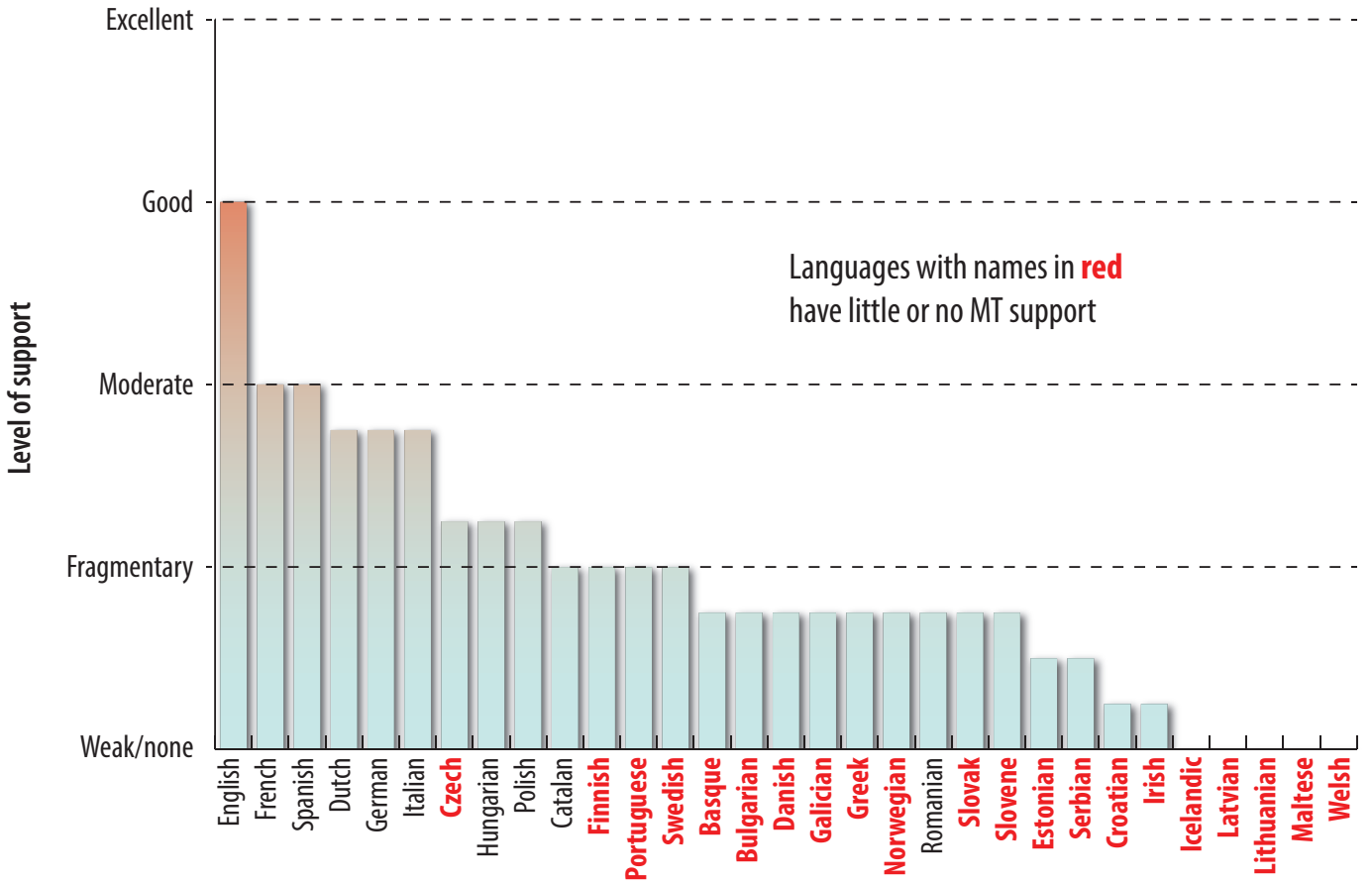
ELG

DFKI IEA LSP The University Of Sheffield. eldA TILDE SAILLABS TECHNOLOGY EXPERT SYSTEM THE UNIVERSITY of EDINBURGH

META-NET Language White Papers "Europe's Languages in the Digital Age"

Basque	Galician	Polish*
Bulgarian*	German*	Portuguese*
Catalan	Greek*	Romanian*
Croatian*	Hungarian*	Serbian
Czech*	Icelandic	Slovak*
Danish*	Irish*	Slovene*
Dutch*	Italian*	Spanish*
English*	Latvian*	Swedish*
Estonian*	Lithuanian*	Welsh
Finnish*	Maltese*	
French*	Norwegian	

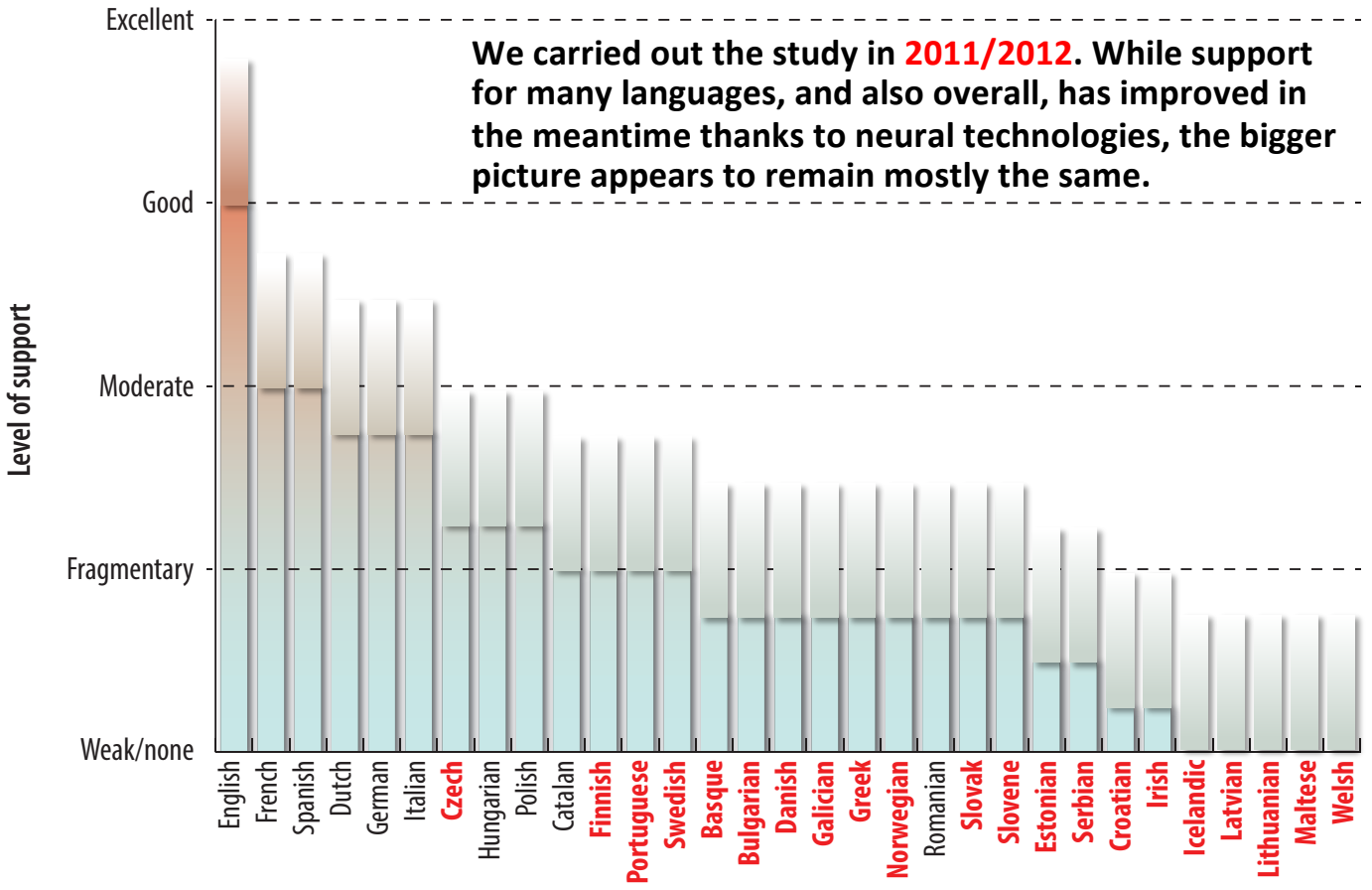
* Official EU language



META-NET

Source: META-NET White Paper Series: Europe's Languages in the Digital Age. Springer, Heidelberg, New York, Dordrecht, London, September 2012. Georg Rehm and Hans Uszkoreit (series editors)

We carried out the study in 2011/2012. While support for many languages, and also overall, has improved in the meantime thanks to neural technologies, the bigger picture appears to remain mostly the same.



META-NET

Source: META-NET White Paper Series: Europe's Languages in the Digital Age. Springer, Heidelberg, New York, Dordrecht, London, September 2012. Georg Rehm and Hans Uszkoreit (series editors)

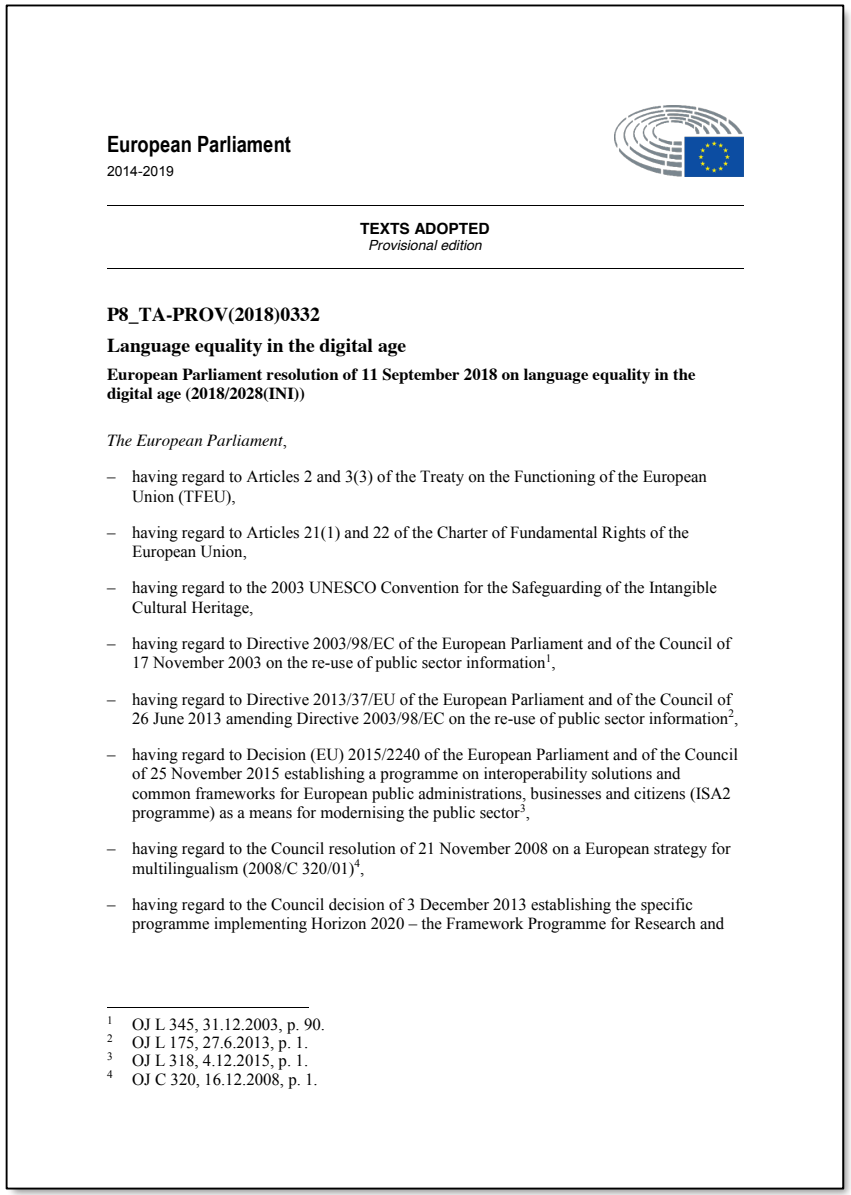
“Language Equality” EP Resolution (2018)

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

Recommendations addressed by European Language Grid:

29. **Create a European LT platform for sharing of services**
41. **Enable and empower European SMEs to use LTs**
26. **ICT integrators should be given economic incentives for LT**
27. **Europe has to secure its leadership in language-centric AI**
32. **Set up LT financing platform; emphasise R&D in Deep NLU**
40. **Develop investment instruments and accelerator programs**



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 information[1],

– 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 information[2],

– 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 sector[3],

– 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 LT Market – CEF Study

Approach and Observations

- Background: SMART 2016/0103 contract: contribute to CEF AT as "multilingualism enabler" for CEF DSIs.
- European LT vendors grouped per type of tech: Translation, Speech, Search, NLU, Analytics
- **EU market approx. 1B€ in 2020 – disrupted by dominant global players**
- SMEs: 70% of EU LT vendors up to 50 employees
- Revenue per company is growing
- Market is highly fragmented: hundreds of SMEs, many address very specific niches, sectors and languages

Recommendations

- Europe is strong in R&I, but not successful to scale innovations and capture the market
- Europe needs European alternatives to fill the gaps and deficiencies and to avoid reliance on monopolies
- Multilingual DSM should be developed on its own infrastructure
- Public procurement can be the major driver for European LT industry to avoid dependence on monopolies
- Plans needed to avoid brain drain

➢ *A platform is needed to connect demand and supply as well as industry and research*

➢**CEF study estimates the European LT Market to reach 1B€ in 2020.**

Deutsches Forschungszentrum für Künstliche Intelligenz GmbH · CROSSLANG TRANSLATION AUTOMATION · elDa · IDC Analyze the Future · IEA ILSP · TILDE

The Global Natural Language Processing Market size is expected to reach $29.5 billion by 2025, rising at a market growth of 20.5% CAGR during the forecast period

Globe Newswire | FOLLOW +
January 14, 2020 4:26am | Comments

➢**Truly incredible market forecast!**
(Source: Global Newswire)

01 Dec. 2020	09:00-10:30	Session 1: Opening
	10:30-10:45	*Virtual Coffee Break*
	10:45-12:00	Session 2: ELG Open Calls and Pilot Projects
	12:00-13:30	*Virtual Project Expo*
02 Dec. 2020	09:00-09:30	Session 3: European Language Equality (ELE)
	09:30-10:45	Session 4: News from the Language Communities
	10:45-11:30	*Virtual Project Expo*
	11:30-12:30	Session 5: European AI Initiatives and Language-centric AI Initiatives
	12:30-13:30	*Virtual Project Expo*
03 Dec. 2020	09:00-10:15	Session 6: ELG and the European LT industry
	10:15-11:15	*Virtual Project Expo*
	11:15-11:45	Session 7: Sustainability of European LT Projects
	11:45-12:00	Session 8: Closing

EUROPEAN LANGUAGE GRID

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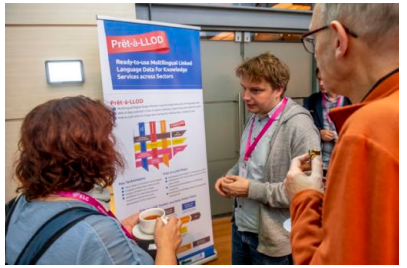
Piloting the European Language Grid

Detailed Programme: https://www.european-language-grid.eu/meta-forum-2020

Virtual Project Expo



- Five dedicated virtual project expo sessions
- A total of 35 projects present themselves, most of them EU-funded
- Each project was assigned one specific time slot …
  … and its own Zoom channel.
- The virtual project expo is supposed to work exactly like a physical one
- Everybody is invited to join the expo/project booths
- All participating project teams have prepared materials
- Please simply join the Zoom channels of the projects you are interested in one after the other and engage with the project teams
- Ask questions, do some networking, enjoy your (virtual) coffee.
- Programme at https://www.european-language-grid.eu/meta-forum-2020/project-expo/

Housekeeping I

- **Zoom Webinar**
  - Participants cannot use their cameras or microphones
  - Only “panelists” are visible and audible
- **Questions and Answers**
  - For questions, please use the “Q&A” section (*please don’t use the chat window*)
  - In “Q&A”, you can ask questions, look at questions already responded to and upvote questions from others that you’re interested in with the 👍🏻 icon
- **Chat**
  - For comments or information you’d like to share.
  - Here you will also find organisational tips and hints.

Housekeeping II

- **Polls**
  - Throughout the conference, we'll be running a few polls.
  - Your feedback is highly appreciated.
  - Answers are collected anonymously.
- **Survey**
  - On Tuesday and Wednesday, when leaving the conference, you'll be lead to a survey.
  - We appreciate if you share your thoughts and opinions with us.
- **Project Expo**
  - Please visit: https://european-language-grid.eu/meta-forum-2020/project-expo/
  - Learn more about exiting new projects and talk to old and new colleagues.

EUROPEAN LANGUAGE GRID

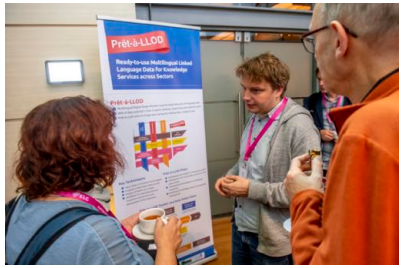
About Grid Community Open Calls Events News Consortium Contact

Day 1 | Day 2 | Day 3

1 December 2020 – META-FORUM 2020 Day 1

12:00 – 13:30 (CET)	
E3C (European Clinical Case Corpus)	Link to the Virtual meeting room
LSDISCO (Lingsoft Solutions as Distributable Containers)	Link to the Virtual meeting room
MKS-LLOD (MKS as Linguistic Linked Open Data)	Link to the Virtual meeting room
Smart euSpeaker (Basque-speaking smart speaker based on Mycroft AI)	Link to the Virtual meeting room
EVALITA4ELG (Italian EVALITA Benchmark Linguistic Resources for the ELG platform)	Link to the Virtual meeting room
OPUS-MT (Open Translation Models, Tools and Services)	Link to the Virtual meeting room
Text2TCS (Extracting Terminological Concept Systems from Natural Language Text)	Link to the Virtual meeting room
PARA4DLM (Textual paraphrase dataset for deep language modeling)	Link to the Virtual meeting room
YouTwinDi (Virtual Personal Assistant Prototype)	Link to the Virtual meeting room
SLAPMAN (Streaming Language Processing in Manufacturing)	Link to the Virtual meeting room
ELG (European Language Grid)	Link to the Virtual meeting room

Zoom links to the virtual project booths



Virtual Project Expo

https://www.european-language-grid.eu/meta-forum-2020/project-expo/

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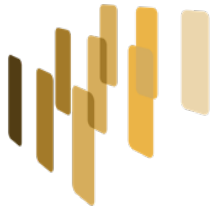

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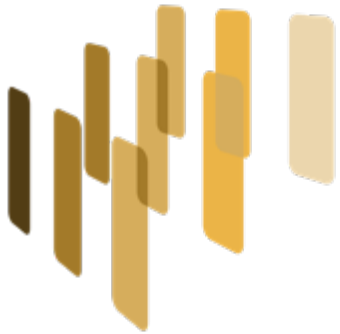

META-FORUM 2020
Welcome and Introduction

Thank you and enjoy the conference!

The European Language Grid has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 825627 (ELG).

Georg Rehm (DFKI)
georg.rehm@dfki.de

01/02/03-12-2020 META-FORUM 2020 – Piloting the European Language Grid (virtual conference)
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