

# **Objectives**

Bridges Across the Language Divide (EU-BRIDGE) aims to develop speech and machine translation capabilities that exceed the state-of-the-art in new and more challenging business cases. We will advance spoken language technologies to permit transmission of human information content from one language to another in situations that could not be handled by automatic techniques to date.

Another key challenge is to reduce the cost of data collection and the dependence on large, manually collected and annotated data for the development of the core recognition and translation technologies. The team of partners proposes to build one of the largest combined language capabilities in speech recognition and translation.

EU-BRIDGE seeks to achieve rapid technology transition and market insertion by building distributed services instead of transferring software and by making deployment part of the project.

# Project Partners

EU-BRIDGE brings together academics, engineering and business experts in order to create competitive solutions to existing translation, communication, content processing and publishing needs. Ten partners from university/research and industrial sectors form the EU-BRIDGE consortium:

- Karlsruhe Institute of Technology, Germany
- Fondazione Bruno Kessler, Italy
- Polish Japanese Institute of Information
  Technology, Poland
- RWTH Aachen University, Germany
- The University of Edinburgh, United Kingdom

- The Hong Kong University of Science and Technology, China
- Red Bee Media Limited, United Kingdom
- Pervoice SpA, Italy
- Accipio Projects GmbH, Germany
- Andrexen, France

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### **EU-BRIDGE - Vision**

Today, Europe is facing greater language challenges than ever before. The European enlargement, emerging economies and exploding communication channels are new factors making the language problem even more complex. Nowadays, the production of multilingual content outpaces our ability to translate it by human effort by far, and we must turn to automatic methods to cope.

Thus, effective and innovative alternatives must be provided to Europe's citizens and businesses. Luckily, the same changes that exacerbated the problem now contribute to better and more effective solutions. High performing machine translation technology can be part of the solution to bridge the language divide, to maintain a sustainable European language infrastructure, through which everyone can speak his own language.



## Research

In its research EU-BRIDGE will address European and non-European languages of high importance to the businesses and citizens of Europe. It will also deal with the problem of addressing under-resourced languages.

EU-BRIDGE will further be working on European infrastructure and network services in order to provide European businesses with a tangible benefit when operating in a multilingual market, e.g. TV captioning and subtitling.

EU-BRIDGE has identified four use cases which will be serviced by its infrastructure and which will prove the concept of EU-BRIDGE to stimulate use by many more application developers in the future.



# The Path to Success

EU-BRIDGE aims at developing automatic transcription and translation services that will permit and facilitate the development of innovative products and applications that require the transcription of and translation between languages, European as well as non-European. The project will prove the usability of these services by implementing four such applications as use cases:

- Captioning and translation of subtitles for TV programs
- Simultaneous translation of academic lectures
- Speech translation services for the European Parliament
- Unified communication translation

Proactive users of the project are European companies operating in a multilingual, audio-visual market. By being able to utilize the services companies will gain a distinct advantage in a globalized, multilingual world.