EASTIN-CL:
Crosslingual and multimodal Search
in a Portal
for Support of Assisted Living

Relevance

Participation and full citizenship, also called **e-Inclusion**, is one of the prominent goals of the European community. This includes the full participation of people with disabilities to social life.

In a 2003 study, the European Commission states that „*assistive technologies play an increasingly central role in equalising opportunities for people with disabilities in all aspects of life*". This statement must be seen in the context that the number of people with disabilities, in an ageing society, will increase from now 11% to 17% in 2020, so the problem will aggravate in the future.

However, access to information about assistive products and technology is still restricted, with language being a significant barrier in the information flow.

Being able to understand foreign language documents, and being able to freely select the communication channel to access such information, as offered by EASTIN-CL, will foster the principles of e-Inclusion.

Objective

The project will support the social participation of disabled and elderly people, by providing crosslingual and multimodal support for accessing information bases on assistive tools and technology.

Recent efforts have linked national assistive technology information bases into a European portal called EASTIN (www.eastin.eu). This portal will be enhanced and made more accessible using language technology:
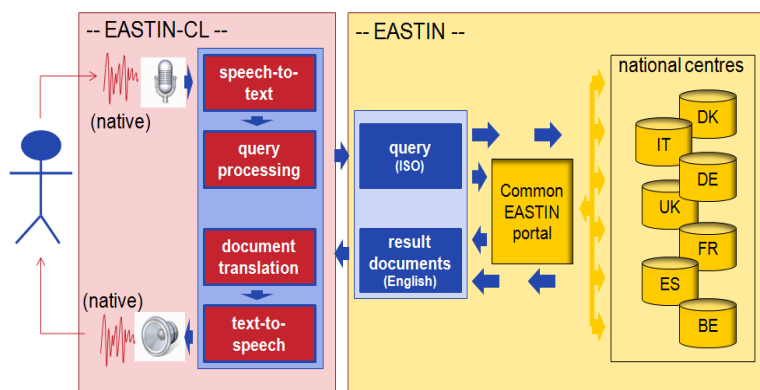
- **Multilingual** technology will allow users to search the data in their native language;
- **Multimodal** technology will allow them to access the portal not just in written but also in spoken communication.

Target users currently are mainly professionals, like doctors, physiotherapists, insurances, or manufacturers. EASTIN-CL will help to open the information bases on assistive technologies also for end users (e.g. ageing people).

Main tasks

EASTIN-CL will support access to information bases on assistive domain along three action lines:

- providing easy and **intuitive access** also for end users, by supporting query formulation;
- making the access to be **language-transparent**, by allowing users to access foreign-language documents in their native language, and have the search results retranslated into their native language;
- adding a **speech communication** channel, by accepting spoken queries, and by converting search results into spoken language, making the communication more barrier-free.

The languages supported by at least one of the EASTIN-CL tools are: Danish, English, Estonian, German, Italian, Latvian, and Lithuanian. Other languages can be added as well.

Expected Results:

The result of the project will be a dedicated language server inside the EASTIN portal. Its task is to act as an interpreter, transforming voice into text and text into voice, and translating queries and documents form and into the users' native language. The language technology components will lead to an improved access to assistive technology in Europe for all citizens.

A by-product will be a multilingual terminological glossary of the assistive domain, covering all relevant search terms and their translations. This glossary will be made available for online access.

Partners:

The EASTIN-CL consortium consists of two profiles of project partners:

On the technology development site, partners are:

- **Linguatec GmbH** (Germany), providing speech technology and translation for German, English, and Italian
- **Tilde SIA** (Latvia), providing speech and translation support for the Baltic languages

On the side of domain expertise, partners are:

- **Institut der deutschen Wirtschaft Köln / Rehadat** (Germany), provider of the largest information base on assistive technology in the German speaking countries
- **Fondazione Don Carlo Gnocchi Onlus / SIVA** (Italy), provider of the largest Italian collection, and host of the EASTIN portal
- **Hjælpemiddelinstituttet** (Denmark), responsible for the Danish centre of assistive technology

Context and Contact

EASTIN-CL is part of the Competitiveness and Innovation Framework Programme of the European Union, in the ICT Policy Support Programme (ICT-PSP),
Theme 5: Multilingual Web Content Management

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