



LT and Bulgarian case

Research and innovation in Bulgaria

- **The Bulgarian research and innovation system:**
 - is governed and financed centrally at national level;
 - is designed and the policies are carried out by the Ministry of Education, Youth and Science and the Ministry of Economy, Energy and Tourism and their respective agencies;
- National R&D investment target - 1.5 % of the GDP by 2020;

Research and innovation in Bulgaria

- National Strategy of Scientific Research 2020:
 - Adopted by the Parliament in 2011;
 - sets five priority areas for the development of research in Bulgaria:
 - Energy, energy efficiency and transport. Development of green and eco technologies;
 - Biotechnologies and ecological foods;
 - New materials and technologies;
 - Cultural and historical heritage;
 - Development of fundamental research under programme and competitive principle to the amount of 15% of the public expenses on science.
 - The information and communication technologies will be developed as a horizontal topic that affects all spheres of life and economy

Research and innovation in Bulgaria

- Roadmap for Research Infrastructure;
- Adopted in 2010;
- Should provide support for upgrading the out-dated research and innovation technology base.

Research and innovation in Bulgaria

- public R&D funding instruments:
 - National Science Fund (NSF)
 - National Innovation Fund (NIF)

National Science Fund

- operates with a wide range of schemes, provides support to:
 - individual scientists
 - scientific groups
 - universities
 - Research institutions
 - business enterprises.
 - The consortia may also include foreign individuals and teams of researchers.

Research and innovation in Bulgaria

- **Bilateral cooperation:**
 - with over 10 countries;
 - based on agreements for scientific and technological cooperation;
 - promotes joint scientific projects in cooperation in all scientific areas;
 - the supported areas can vary depending on the partner country

Research and innovation in Bulgaria

Operational programme “Competitiveness”:

- coordinated by the Ministry of economy, energy and tourism
- grant schemes **Launched in 2011**:
 - Development of innovations by start-up companies;
 - Development of new and strengthening of existing technology transfer offices;
 - Development of new and strengthening of existing technological centres;
 - Support for research and development in Bulgarian Enterprises.
- grant schemes to be **launched in 2012** :
 - Development of applied research in research organizations in Bulgaria;
 - Establishment of Science and Technology Park;

LT and Bulgaria

- First international and national initiatives supporting the Language Technologies for Bulgarian began more than two decades ago.
- The EU provided funding for a number of research projects supporting the development of language technologies for Bulgarian:

EU funded research projects

- **LaTeSLav** (Language Processing Technologies for Slavic Languages, 1991 – 1994) initiative aimed at developing a prototype of grammar checker;
- **BIEDITA** (Bilingual Electronic Dictionaries and Intelligent Text Alignment, 1996–1998) funded the development of bilingual electronic dictionaries;
- **GLOSSER** (Support of Second Language Acquisition and Learning from Aligned Corpora, 1996–1998) aimed at supporting foreign language training;
- **Multext-East** (Multilingual Text Tools and Corpora for Central and Eastern European Languages, 1995–1997);
- **EAGLES** (European Commission's Expert Advisory Group on Language Engineering Standards) projects provided the Bulgarian language resources in a standardised format with standard mark-up and annotation.

All these resources were later expanded and upgraded in the **ELAN** (European Language Activity Network, 1998–1999), **TELRI I** in II (TransEuropean Language Resources Infrastructure, 1995–1998 / 1999–2001) and **Concede** (Consortium for Central European Dictionary Encoding, 1998–2000) initiatives.

EU funded research projects

E-learning projects:

- supported by the Bulgarian institutions;
- aim at modernisation of the national educational system;
- introduce e-learning training principles and tools for curricula enhancement;

Projects funded under the ICT Policy Support Programme (ICT-PSP):

- 2009 - 10 projects were funded (app. 1.4 million EUR);
- 2010 - 8 projects were funded (651,510 EUR);
- 2011 - 10 projects were funded (more than 1 million EUR) ;

In conclusion:

The public funding for language technologies for Bulgarian is still lower than that for comparable projects in Europe.