



#### Jan Bujnak

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#### History

- 1953 University of railway transport Prague
  - 1959 University of transport
    - **1960** moving to Žilina
  - **1978** University of transport and communications
    - **1996** University of Žilina



#### 7 faculties

- of operation and economics of transport and communications
  - of mechanical engineering
    - of electrical engineering
      - of civil engineering
  - of management science and informatics
    - of special engineering
      - of science



#### **Specialised institutes**

- Institute of forensic engineering
- Institute of information and communication technologies
  - Institute of continuing education
    - Industrial liaison office
  - CETRA Centre of excellence for transportation research



#### **Affiliate organizations**

- Slovak centre for productivity
- Science and technology park Žilina
- Competence and innovation centre
- CEIT-Central European Institute of Technology
  - Other



#### **International cooperation**

- With universities more than 80 universities in Europe, USA, Asia
- With companies Alcatel, Siemens, HP, IBM, Microsoft, Volkswagen, Orange, Scheidt & Bachmann, etc.
  - On projects PHARE, TEMPUS, CEEPUS, COST, COPERNICUS, 5.FP and 6.FP of the EU





## Zilina region





#### Zilina region in Slovakia







#### Zilina region characteristics

- North-west Slovakia
- Part of the Euro-region Beskydy
  - 700.000 inhabitants
- Important crossroads of transportation
- Industrial region (information and communication technology, machinebuilding and electrical engineering industry, metallurgy, wood, cellulose, paper production,...)





#### Direct foreign investments to the region Zilina

- Alcatel, Germany
  - Punch, Belgium
  - INA, Germany
- ECCO, Denmark
- Neusiedler, Austria
- Matsushita, Japan
  - KIA Motors



#### ✓ comparison of Bratislava and Zilina region

#### Contribution of 10 greatest companies at added value in Zilina region



#### **Contributions of 10 greatest companies in Bratislava region**





Centre for Transport Research (CETRA) at our University of Zilina, as the recognized centre of excellence by the European Commission is active in several areas of the basic and applied research. Especially in road, rail, waterborne and air transport, design and construction of transport infrastructure, electronics, signalling, machine building, safety and security of transport, even transport problems related forensic engineering. Thanks to this unit, the university can participate in the projects of the Framework programmes of the EU as contractor, coordinator or to be participant in the network of excellence on the above topics. The efforts of CETRA are recently concentrated on the support of the University` faculties and departments preparing international project and links.

#### ✓ INTRANSNET - virtual laboratories





#### Science and Technology Park Zilina



#### Science and Technology Park Zilina

- Science and technology park Zilina project of the University of Zilina
  - Science and technology park was established in august 2001
  - An association of legal entities



#### Members of the STP Zilina

- University of Žilina
- Municipality of Žilina
- Power energy company, inc., Žilina (EDF)
  Žilina region
  - Association of electrical engineering industry of the Slovak Republic, Bratislava

Other



### STP Zilina is a centre of

- Application of new ideas in the region of north-west Slovakia
  - SME's support
  - Support for Hi-Tech development in different areas
- New companies formation a business incubator
  - Concentration of new investors in the region





## **Slovak Productivity Centre** (SLPC)

is an open, national organization established at the University in 1998. The activities of the Centre are focusing on the support, extension and propagation of the new knowledge and skills in the field of productivity and competitiveness into national industry. At the same time, stimulation and support of companies in productivity increasing area might contribute to the economic development of the country.





#### **Institute of Competitiveness and Innovations** (ICI)

has been set up in 2004 to support Zilina region development by creating an implementing technology, processes, and innovated products and to transfer then in industry. The actions implemented are many, varied and often sophisticated. Research projects are set up on request and specialised programmes per technology sector aim to make the regional actors more competitive. There are also international projects helping self-financing and benefiting from opportunities of global market. Research-based learning, where mainly doctoral students do more to educate themselves trough project solving is the preferable learning system in this institute.



#### CEIT Central European Institute of Technology International R&D Center





#### Total investment € 3 mil.

Central European region with the rich technical and technological history represents a market of about 150 million consumers. Many industrial companies are settling this region. It is important to manage and further develop high-tech areas with a large and significant potential of economic growth to become successful on the future international markets. This is mission of the **Central European Institute of Technology** (CEIT) started its activities in 2004 and officially established two years later, as the centre of excellence in research and development, technological processes, support of entrepreneurship, innovations and knowledge economy, which create basis for productivity and competitiveness growth. CEIT is located in the neighbour of the main campus of the University of Zilina with the purpose to integrate theoretical knowledge basis of academics with the industrial experience through research and developments on the base of the private-public partnership. This open professional company, which would work on further development of co-operation with all institutions, prepared to contribute to the development of the region aims to become a part of the European Institute of Technology, directly integrated to the European Research Area.









## The Centre of Aviation Education and Training (CAET)

#### The Centre of Aviation Education and Training (CAET)

is the spin-off unit of the Faculty of economy and operation of transports with the field of study of great repute in the air-transport. The existing intellectual potential was in addition exploited for launching, in 2003, the project of international livelong learning of aircrafts pilots and the other relevant personals.



Basic pilot training, recondition courses, flight-transport activities, controls and maintenance of planes, consulting activities are resources of centre self-financing.







#### Institute of forensic engineering



## The Institute of Continuing Education (ICE)

It is an integral part of university providing the system of continuing education for all age categories following the latest trends in technology and science. Flexible educational programmes can use the university technical background as well as contracting partner's cooperation with the support of information and communication technologies. Through new methods of delivery, it could have a major impact on regions in variety ways, including engaging

dispersed populations, and offering high quality international education.

Coordination of continuing education in the region and preparation of the system of life-long education for local firms and industrial enterprises present the next aims of the institute.

# Thank You for Your attention.

Have a nice workshop.