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ITS ERA Chair –
ITS deployment in Slovakia

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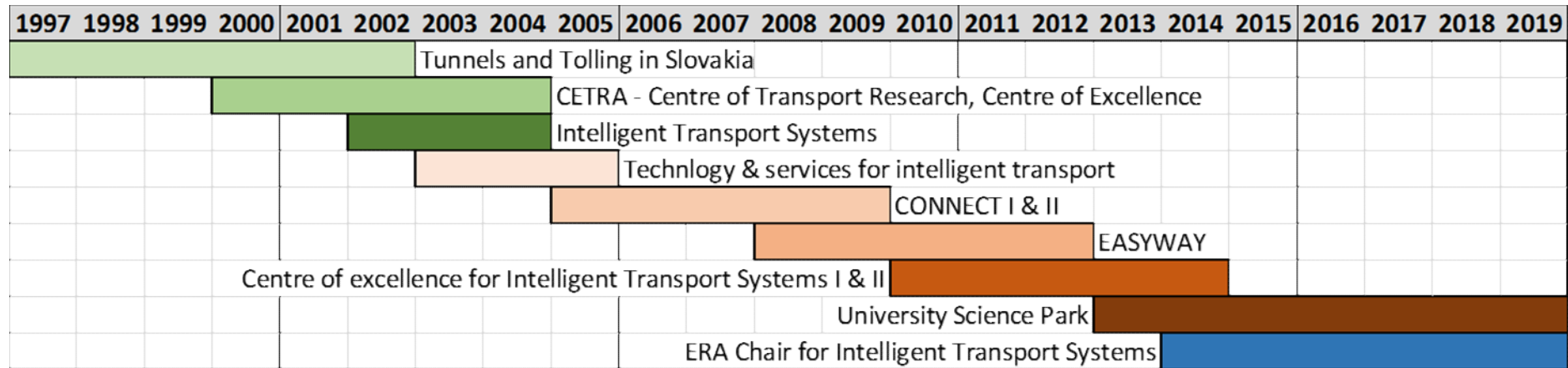Žilina

Workshop on eCall, Ostrava, 11 November 2015

University of Žilina

- ➢ **1953 established as College of Railway Transport** by separation from the Czech Technical University in Prague
- ➢ **1959** name changed to **College of Transport**
- ➢ **1960** relocation to Žilina
- ➢ **1980 University of Transport and Communications**
- ➢ **1996 University of Žilina**

Transport Activities in EU projects

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

Tunnels and Tolling in Slovakia

CETRA - Centre of Transport Research, Centre of Excellence

Intelligent Transport Systems

Technlogy & services for intelligent transport

CONNECT I & II

EASYWAY

Centre of excellence for Intelligent Transport Systems I & II

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ERA Chair for Intelligent Transport Systems

Important EU Projects

- ITRANSNET (2002-2005) http://www.intransnet.org
- CETRA (2000-2OO4)
- SurfTran (2004-2006)
- EURNEX (2004-2008) http://www.eurnex.net
- EURO-TRANS_Days (2006-2008)
- USTIR (2008-2010)
- Star-net Transport (2008-2010)

The **ERAdiate** Project

Enhancing **R**esearch and innov**A**tion **d**imension of the University of Zilina in **i**ntelligent tr**a**nsport sys**t**ems

Project Highlights

- 11 ERA Chairs granted
  out of 111 applications
- Project volume > 2.5 million € (5 years)
- Contribution to
  - Excellent research
  - Enhanced competitiveness
  - Growth and jobs in line with
    regional innovation strategies

ERAdiate

Objective - unlocking and developing the research potential and promoting excellence of the University of Zilina and the Zilina convergence region in the field of Intelligent Transport Systems

Key instruments – systematic development of human resources, effective utilization of unique research infrastructure and transformation of the institution towards enhanced competitiveness

Research Focus

- Cooperative and complex systems

- SMART solutions

  - Smart & Liveable Cities

  - Access

  - Pricing

- Decarbonisation of mobility / eMobility

- Business models for ITS and ICT

- Inclusive mobility

- Societal effects of ITS deployment

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Applied Research

- Decision support (political / commercial)
- Key Performance Indicators & SLAs
- Big Data / Open Data
- Interoperability
- System Architecture
- Roles & responsibilities
- Usability / HMI / distraction
- Data protection and privacy
- Liability issues

ITS deployment in Slovakia (?)

"The most significant problems faced by urban public transport include insufficient funding of urban transport companies and the ensuing poor condition of rails and overhead lines for trolleybuses, traction substations, obsolete vehicle fleet, insufficient share of low floor vehicles, insufficient quality standards and transport schemes and the absence of lanes restricted to urban public transport and intelligent transport systems"*.

*Source: Partnership Agreement of the SR
for the years 2014 – 2020, approved by EC on June 2014

A few examples…

Truck tolling

- used since January 2010 for trucks over 3,5 tones on more than 17,750km of roads including 13,480km in towns and villages and other minor roads - making it the longest such network in the European Union

- toll pricing uses a distance-based model using the satellite technology for positioning the onboard units (based on GPS, also EGNOS and Galileo ready)

- 4,000 road segments in the satellite-based tolling system

Public full-coverage RDS-TMC service available in Slovakia since June 1st, 2015

- provided via 18 transmitters of Rádio Slovensko

- covers all motorways, expressways, 1st and 2nd class roads, selected 3rd class roads as well as selected urban streets

Integrated Transport System in some cities

ITS deployment in Slovakia / 1

Ministry of Transport, Construction, and Regional Development

- harbours transport, construction, regional development, post and telecommunications, public works and tourism agendas

- runs the Operational Programme Transport (2007-2013) and Operational Programme Integrated Infrastructure (2014-2020) for country´s EU projects

Ministry of Interior

- responsible for the eCall implementation

ITS deployment in Slovakia / 2

For the next programming period, 2014-2020

- Slovakia will be able to draw €20.29 billion from the EU budget

- Slovakia has defined six operational programmes: research and innovation, integrated infrastructure, human resources, quality of environment, integrated regional operational programme, and effective public administration

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Operational Programme Integrated Infrastructure

Investment priority 7i) Support for unified multimodal European transport space by investments to TEN-T

Activities:

A.   Construction of motorways and expressways including feeders

B.   Deployment of Intelligent Transport Systems

C.   Increasing safety of road traffic

D.   Project preparation

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Activity B. Deplyment of ITS

Setting up and development of the National Transport Information Center

- operational and information center for collection, handling and providing transport and other nationally, regionally and/or locally important information for travellers

Deployment of the equipment for traffic monitoring and control on highways and fast roads

- for automatic analysis of traffic flow; variable traffic signs; camera systems; control, surveillance and communication systems

Thank you for your attention!

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