



# ERA Chair on Intelligent Transport Systems

ERA Chairs and mobility schemes in H2020:  
Drivers, barriers and lessons learnt



**ERA**diate



**E**nhancing **R**esearch and innov**A**tion  
**d**imension of the University of Zilina in  
**i**ntelligent **t**ransport **s**ystems

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# The People in ERAciate

- **Dr. Karl Ernst Ambrosch**  
Entrepreneur and MD of Austria's largest Research Institute for Mobility and Energy
- **Dr. Dietrich Leihs**  
Researcher in ITS with experience in SMEs and industry
- **Prof. Tatiana Kováčiková, PhD.**  
Head of Science Operations at COST
- **doc. Ing. Ľuboš Buzna, PhD.**  
Senior Researcher in optimization of complex systems
- **Dr. Giuseppe Lugano**  
Science Officer at COST
- Part time staff



# Impacts on Research and Innovation

- **Unlocking** and stimulating the realization of the UNIZA full **research potential** in the ITS field
- More **effective management** of research and innovations at the University of Žilina (UNIZA)
- Elevated **international competitiveness** of the UNIZA by means of transnational **co-operation**
- **Increased participation** of the UNIZA in the European research and development programs
- **More intensive national and international cooperation** with stakeholders, especially innovative business partners, research institutions and professional associations



# Institutional and Structural Changes

Impacts related to institutional and structural changes, aiming for more effective research and innovation management within UNIZA:

- Strategy for sustainable development of **human resources and research infrastructures** in the field of Intelligent Transport Systems (ITS) at UNIZA
- **Integration of ERA priorities**, including open recruitment, gender balance, peer review, and doctoral training, **into processes at UNIZA**

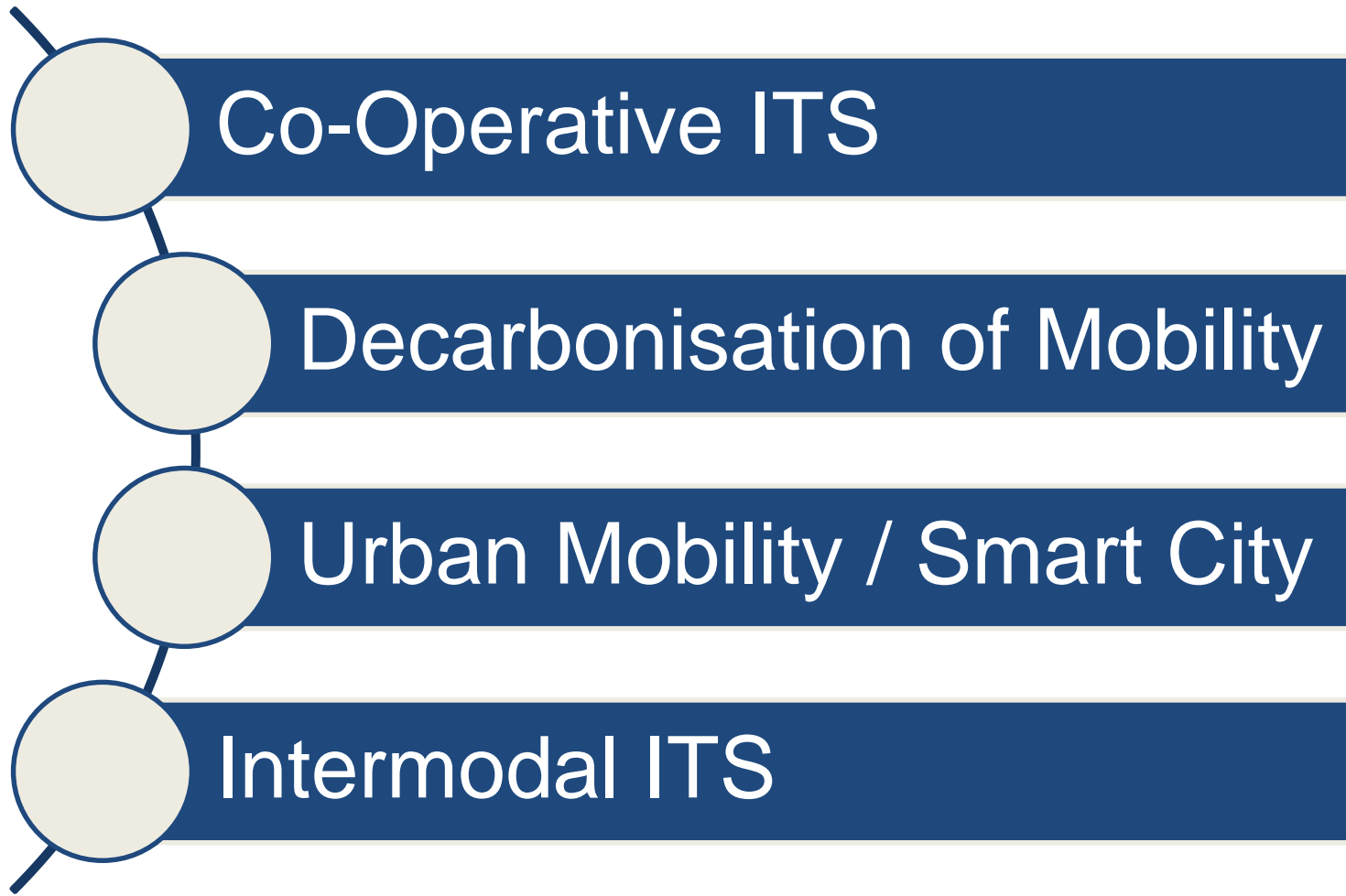


# Impacts to Regional Development

- Enhanced interaction with regional and national authorities in **designing and implementing research and innovation strategies** and policies for the SMART specialization
- **Enlarged research and innovation performance** of the UNIZA with direct contribution to regional and national development plans
- **Effective contribution to the regional economic and social development**



# Fields of Activity



# Transdisciplinary Conference



## INTELLIGENT TRANSPORT SYSTEMS: A TOOL OR A TOY?

*Research and innovation opportunities and challenges for autonomous driving and new transport models.*

22-23 November 2016, Zilina, Holiday Inn

The outcome of this co-organised event between the **COST Association** and the **University of Zilina**, namely the **ERA Chair project on ITS**, will contribute to the discussion on the deployment, impact and upcoming challenges faced by ITS at European level. Both organisers will count on their multiple knowledge and know-how on the topic through COST Actions and other European stakeholders active in ITS.





# Widespread Activities

- **EC/DG MOVE direct call cancelled** (consultancy services on Urban Mobility Indicators)
- **INTERREG EUROPE**  
Innovative Public Transport Planning for more efficient, environmental and user friendly public transport - *Partner*
- **INTERREG CENTRAL EUROPE**  
Support the Regional Transition towards a User Centric Sustainable Mobility (SStratUS) - *Lead*
- **OPAaI-VA-DP-2016** (Slovak Research Agency)  
Research and development of new generation GIS utilizing new GNSS services - *Partner*



# Widespread Activities

- Research Agency of the Slovak Republic, structural funds, programme Long-Term Strategic Research and Development in the Fields of RIS3 SK Specialization with Regards to the Available Scientific and Research Capacities: Center for Strategic Research of Smart Solutions for Safety of Transport - *Partner*
- FFG - Austrian Research Promotion Agency  
SIMMARC - Safety IMprovement using near Miss Analysis on Road Crossings - *Partner*
- EC: I\_HeERO – Infrastructure Harmonised eCall European Pilot - *Partner*



# Widespread Activities

- H2020-MSCA-RISE-2016:  
SENSIBLE – Staff Exchange Program - *Partner*
- Alan Turing Institute - Lloyd's Register Foundation  
Decentralised real-time electric vehicle charging:  
optimality, fairness and resilience - *Partner*

## In Preparation

- APVV VV 2016 – Data-centric optimization of electric vehicle operation - *Leader*



# Widespread Activities

- H2020 – Preparation of projects in different stages
  - **WIDESPREAD-04-2017: TEAMING „eMobility“** – Leader
  - MG-4.1-2017 (IA): Increasing the take up and scale-up of innovative solutions to **achieve sustainable mobility in urban areas** – Leader
  - MG-4.2-2017 (IA): Supporting 'smart electric mobility' in cities – Leader
  - MG-8-5-2017 (RIA): Shifting paradigms: Exploring the dynamics of individual preferences, behaviours and lifestyles **influencing travel and mobility choices** – Leader
  - ICT-11-2017 (CSA): Collective **Awareness Platforms for Sustainability and Social Innovation** – Leader



# ERA Chair

- Job found advertisement by chance
- Complete change of life
- Different concepts for daily life
- Opportunity for financing a full team with reasonable set-up time (critical mass)
- Research vs. management/business development
- Autonomy in strategy and activities
- Use existing and enlarge networks of ERA Chair staff
- Knowledge about Program not widespread
- Impact depends on people and institutions involved



# Difficulties

- Remote place
  - Team creation – several selected candidates did not show up
  - Travelling is a burden in time and effort
- Administration
  - Complicated regulations
  - No process approach
  - Employees are to support administration, not vice versa
  - Language barrier
  - Repeated gathering of redundant information
  - Daily routine – lower limit for tendering = 1€



# Achievements

- Improved start of employment
- Very good spirit
- Very good co-operation with the Regional Development Agency
- Enhanced Visibility of UNIZA due to presence at and contributions to international Conferences
- Organization of the only ITS-Conference in Slovakia under the auspices of the EU Presidency
- Active participation in ITS-Standardisation leading to better access to international stakeholders



# ERAdiate - Lessons Learnt

## ERAdiate

- Is considered to be business developer and not a research department
- Is not part of decision taking at UNIZA
- Has almost no direct communication with UNIZA management
- Has no direct communication with UNIZA scientific board
- Is not on par in terms of academic recognition
- Is perceived as a competition by Faculties
- Cannot change structure and processes of UNIZA





# ERA Chair - Lessons Learnt

## ERA Chair shall be

- considered as a valuable asset at the institutional level
- attached to the academic structure
- well integrated in the institution
- not considered as competition
- „business developer“ due to international recognition and network
- partner for decision makers on all political levels
- partner for SMEs and industry



# Lessons Learnt

## Requirements

- Flexibility of people involved
- Support from administration
- Communication in English
- Long-term strategy aligned with the institution
- Visibility and Impact
- Sustainability
  - Availability of concept is required from the early days
  - ERAdate - Continuation of employment not intended by UNIZA
  - Creation of a spin-off ? Privatization of risk



# Thank you for your attention!

## Karl Ernst Ambrosch

ERA Chair Holder for ITS @ University of Zilina, SK

[Karl.Ambrosch@uniza.sk](mailto:Karl.Ambrosch@uniza.sk)

[www.erachair.uniza.sk](http://www.erachair.uniza.sk)

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