UNIZA H2020 Scientific Café Projects H2020

Jaroslav Mašek

Department of Railway Transport

- Department exist from university founding - more 65 years
- Focusing on transport operations processes and economics
- Acctually 16 employees
- 10 PhD. students
- About 200 students (bachelor, master, PhD.)

Department

- Tradition in research and projects

  (7.FP, H2020, Eureka, Interreg, APVV, Kega, Vega,...)

- Many contacts from railway sector, industry and academic

- Experiences with cooperation in small and big consortiums

- Unofficial team of people at UNIZA who deal with railway research (PEDAS, FRI, STAV, STROJ,...)

Projects

- 2 succesful projects in FP7 – **VEL-Wagon** - Versatile, Efficient and Longer Wagon for European Transportation (2010-2012)

  and **Tellibox** - Intelligent MegaSwapBoxes for Advanced Intermodal Freight Transport (2008-2011)

- 2 actual projects H2020 – **SkillFul** - Skills creation for the future transportation professionals of all levels (2016-2019)

  and **GoF4R** - Governance of the Interoperability Framework for Rail and Intermodal Mobility (2016-2018)

- 2 proposals in 2017 (**C4RRYON, Energy4ever**)

- 2 new proposals in 2018 - waiting for evaluation – **FTI project**, **MIRiAM**

- and many others national and international projects

- Full title: Governance of the Interoperability Framework for Rail and Intermodal Mobility

- IP4 Shift2Rail programme - OC-2016-01-2

- Duration: 24 months

- Total Estimated Eligible Costs: 2 000 000 €

- 16 partners

- More info: http://www.gof4r.eu/

- The objective of the GoF4R project is to define sustainable governance for the Interoperability Framework that will create the right conditions to introduce seamless mobility services and foster the development of multimodal travel services.
- GoF4R will help to overcome obstacles currently impeding development of market innovation by fostering a large acceptance of the "semantic Web for transportation."
- The results and knowledge will be used in next projects within IP4 S2R

- WP2 User demand
- WP3 Regulatory Environment for Interoperability Framework components
- WP4 Semantic Interoperability Technology Market
- WP5 Governance and management structure for interoperability framework - Deployment roadmap
- WP6 Dissemination and Exploitation

- 21 partners from 12 countries focusing on all transport modes

- Budget - 2.991.672,20 EUR

- Leader of the project at UNIZA – assoc. prof. Dana Sitányiová, PhD. from Faculty of Civil Engineering

- Critically analyse existing, emerging and future requirements for the knowledge and skills of transport workers.

- Analyse the current education offer

- Specify the content of education and training according the new needs.

- Define competences, profiles and requirements of teachers and students.

- Design new business models for education and training.

- Test new courses

- Changes in transport - new types of fuels and electrification, digitization, autonomous transport systems, security, multimodality,
  ecology, globalization
- Changes in transport technologies – IT and telematics applications, processing of big data, new materials and processes, tracking of goods
- Changes in transport labor market
- 2 courses/training programme: **Modelling and Simulation for Railway Engineers** and **Monitoring and maintenance training focused on safety of road tunnels**

C4RRYON

- The main objective of the C4RRYON project was to develop a set of advanced "foundational" technologies, implementing sophisticated "machine learning" algorithms for the **guidance of each individual passenger on the best possible use of available transportation infrastructure and services in a given combined Passenger/Transportation system present and predicted situation.**
- 16 partners, 3.5 mil € budget
- 10 points in evaluation, nonfinanced, reserve list

Experiences and recommendations

- Need strong partner in consortium
- Need a lot of resources (personal and finance) for making relationships, than prepare the proposals
- System of financing the universities – based on students, teaching, publishing, research
- Clear internal rules for personal cost calculation, accounting, etc.
- Real information system and support centre – which kind of support?
- Real information support, not only help with project management or preparing rules for rules

Contact

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