

TransSLO Project – Slovenian Transport Research Capability and the National Transport Research Agenda

Srečko Janša,

on behalf of SLOVENIA CONTROL, Ltd.

Subject

- Overview of the TransSLO project and Transport Research Priorities,
- National Transport Research Agenda - Draft Roadmaps

TransSLO Project partners:

Coordinator:

Slovenia Control, Slovenian Air Navigation Services, Limited

Partners:

Ministry of Transport of the Republic of Slovenia

Electrotechnical Association of Slovenia (EZS)

NewRail - Centre for Railway Research at Newcastle University

Adviser:

EU-Travyz – Mr Dennis Schut

The TransSLO project is funded by the European Commission. TransSLO wishes to thank DG Research and particularly the support of Ms. Susana Martins, the TransSLO Project Technical Officer.

The TransSLO EU funded project was designed to enhance the participation of Slovenia in EU funded research projects within the EU Framework program for Research.

TransSLO supports the "knowledge triangle - education, research and innovation of dr. Potocnik ", the Slovenian Commissioner for Research.

For the EU to fully embrace the knowledge era, the Knowledge for Growth Pact should aim at reinforcing the knowledge triangle (education, research and innovation) and make it productive via its integration with policies that bring about favourable and supportive framework conditions.

To facilitate and stimulate this process the following activities were planned:

- To set up a database on the Slovenian transport research expertise
- To organise a transport research PhD Day
- To organise a TransSLO Workshop, bringing together experts
- To identify the Slovenian research expertise and strengths
- To report at the TRA Transport Research Arena Conference in Ljubljana 21-25 April 2008

Approach – survey techniques to define slovenian research capabilities

- National transport research capabilities:
 - Questionnaire (410/188)
 - Database – information storage (<http://pismis.uni-mb.si/foreword/>)
 - Researchers
 - Personal data
 - Research area
 - Research organisations
 - Contact data
 - Web page address
 - Web inquiry
 - TransSLO Workshop Digital Voting
 - TransSLO Workshop best practice examples
 - Slovenian involvement in FP6 projects - European Research projects involving Slovenian partners

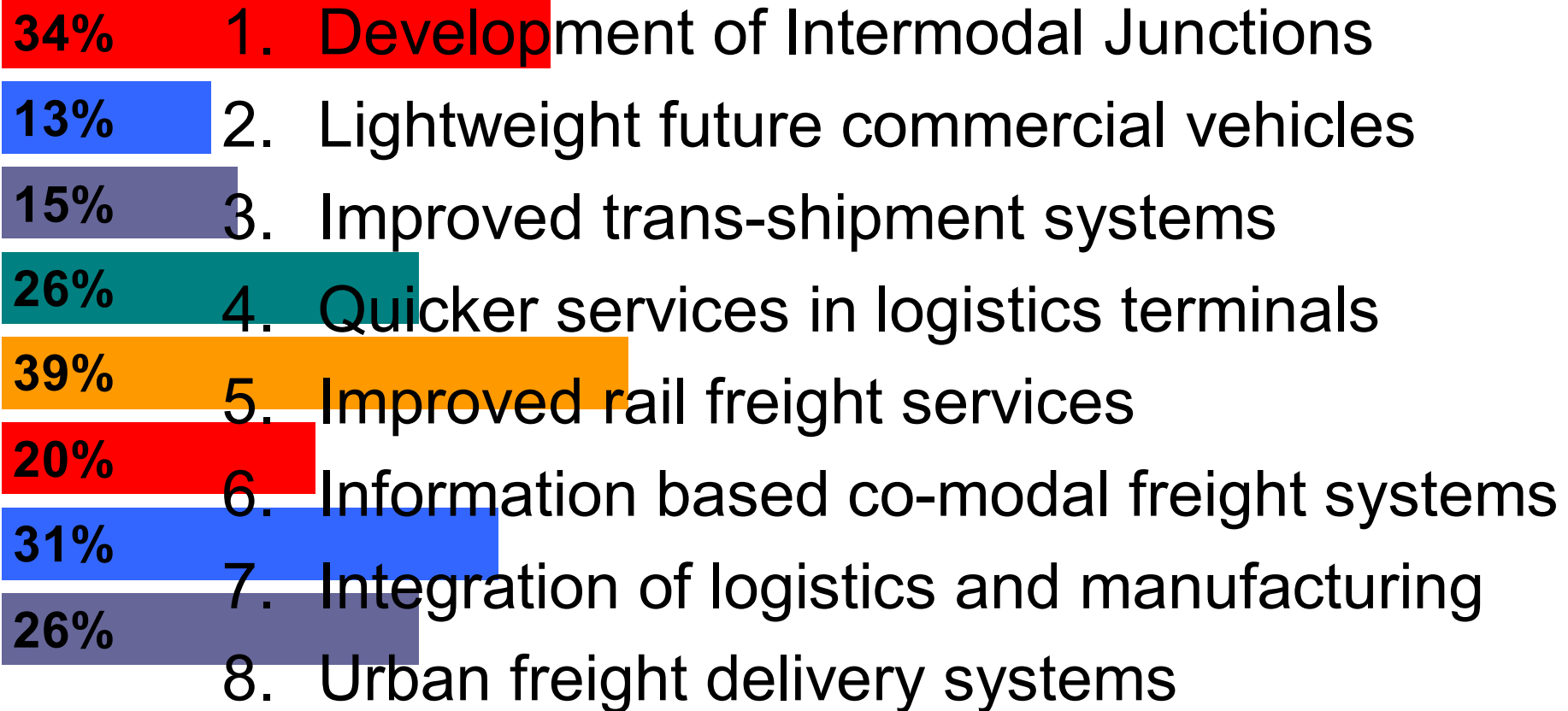
**TransSLO Workshop on
SLOVENIAN & EUROPEAN TRANSPORT RESEARCH PRIORITIES
12 October 2007, Ljubljana, Slovenia**

The goals were:

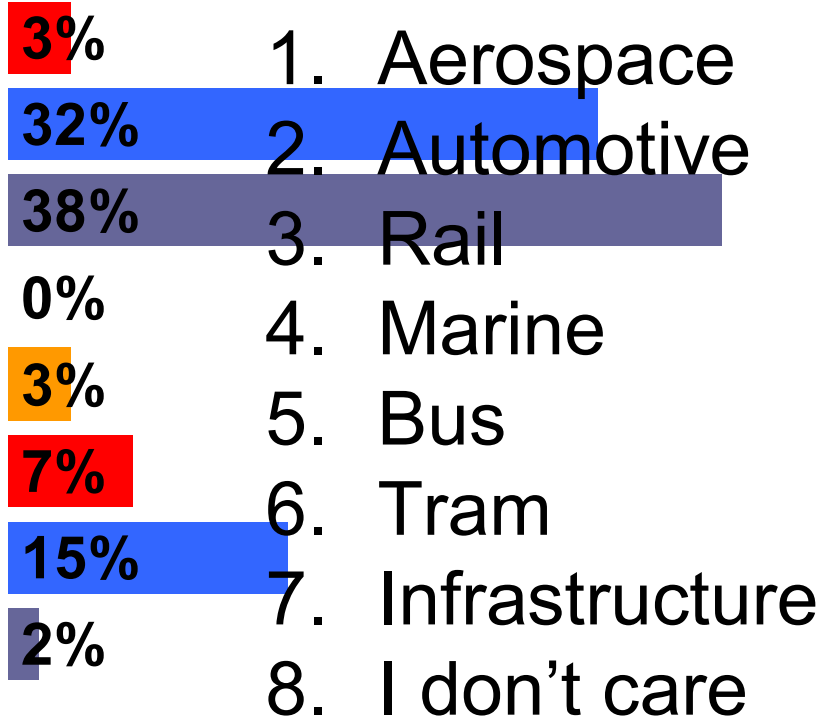
- Promote research and development in Slovenia on the field of transport
- Define national highlights and priorities (interactive session)
- To generate information for decision makers and politicians on Slovenian, Balkan and EU transport research priorities.
- Promote collaboration between EU countries
- Opportunities to exchange ideas between partners
- Preparation for next call for proposals

- Two examples /digital voting session

Over the next 20 years, what will be the main drivers for the improvement in intermodal freight? **Select up to three**



Which industry has the biggest role to play in increasing the use of the environmentally friendly transport modes (i.e. who should be taking the lead)?



Slovenian research priorities

- 5 EU priorities:
 - **greening of surface transport**
 - **encouraging modal shift**
 - **ensuring sustainable urban mobility**
 - **improving safety and security**
 - **strengthening competitiveness**

Slovenian research priorities

Priorities for **greening of surface transport** in Slovenia:

- Technologies for clean power and reduced emissions
- Environment-friendly and efficient industrial processes
- Improved and efficient power trains/propulsion systems
- Lightweight future commercial vehicles
- Preventive and emergency interventions to protect marine, coastal and land environments
- Noise reduction

Priorities for **encouraging modal shift** in Slovenia:

- Improve interfaces between transport modes
- Improved rail freight systems and co-modal services
- Intelligent road systems
- Improve services in stations and terminals
- Integration of logistics and manufacturing
- Information based co-modal freight systems

Priorities for **ensuring sustainable urban mobility** in Slovenia.

- **New mobility concepts for passengers and accessibility for all**
- **Intelligent mobility systems and multi-modal interfaces**
- Innovative strategies for clean urban transport
- Urban freight delivery systems
- Vehicles using second generation hybrid electric technology
- New vehicle concepts for the delivery of goods

Priorities for **improving safety and security** of transport in Slovenia.

- **Integrated safety and security for surface transport systems**
- **Safety and security by design**
- Integral system solutions for safety
- Road safety data collection, transfer and analysis
- Safer road tunnels
- Transport of hazardous substances

Priorities for **strengthening competitiveness** in Slovenia.

- Advanced and cost effective infrastructure construction, maintenance and monitoring
- Competitive surface transport products and services
- Innovative product concepts
- Promote the start-up and emergence of new high-tech SME's
- Competitive transport operations
- Competitive industrial processes

Priorities for **cross-cutting activities** in Slovenia.

- Promoting the involvement of Slovenia in European research
- **Stimulating participation of Small and Medium Size Enterprises (SMEs)**
- Stimulation of International Cooperation
- Developing a sustainable freight transport system
- Training new transport researchers
- Creating new Centres of transport research excellence

Ministry for Transport Themes connected to EU priorities

- Targeted data collection and analysis - *Competitiveness*
- The cost of transport - *Competitiveness*
- Transport and energy - *Greening*
- Integrated planning for transport in the future - *Decongestion*
- *Safety and security*
- Transport and the community – *Urban mobility*
- Transport demand management - *Competitiveness*
- Transport and climate changes - *Greening*
- Transport and health – *Greening*

National research agenda – a road map for Slovenia

- **Greening of transport in Slovenia**

- to develop technologies for clean power and reduced emissions
- to support action on climate change
- to reduce pollution, which is a priority to safeguard the health of citizens
- to improve the cleanliness and energy-efficiency of power and promote the use of alternative fuels

Activities will cover cost effective infrastructure, lightweight vehicles and overall system optimisation

- **Decongestion of transport corridors in Slovenia**
 - decongesting of transport corridors
 - to improve modal shift
 - to improve the interfaces between transport modes for both passenger and freight services

Activities addressing the interoperability and operational optimisation of local, regional, national and European transport networks, systems and services and their intermodal integration in an integrated approach.

- **Sustainable Urban Mobility**

- passengers are the main consideration and the major target is accessibility for all.
- Research is encouraged on new mobility concepts and innovative strategies for clean urban transport.
- particular attention will be paid to non-polluting modes of transport and passenger friendly multi-modal interchanges.

- **SAFETY AND SECURITY**

- to ensure that all cost effective safety and security improvements are efficiently integrated into the Slovenian transport system.
- The vulnerable in the community should always be considered so the priorities are persons such as motorbike and cycle riders and pedestrians.
- emphasis will be placed on integrative approaches linking human elements, structural integrity, preventive, passive and active safety including monitoring systems, rescue and crisis management.
- Security will be addressed in areas such as aviation where it is an inherent requirement to the transport system.

- **STRENGTHENING COMPETITIVENESS**

- To provide affordable transport, with the main contribution coming from advanced and cost effective transport infrastructure;
- Improving competitive surface transport services and products.

Emphasis will be placed on innovative and improved product and system concepts and improved transport services ensuring higher customer satisfaction. Slovenia will use targeted data collection and analysis to improve services related to demand management. A competitive target is to try and reduce the cost of transport services in order to promote public transport use.

Research Tools

- For Slovenia it is particularly important to address **all transport modes including aeronautics**. The European Commission proposes **new topics** in various calls and these are grouped by the activities covered in the ROADMAPS. Key aspects that need to be addressed in proposals are **environmental impacts of transport and climate change; enhanced integration of transport modes; transport system efficiency and competitiveness, and raising awareness of transport research results in Europe**.
- Slovenia needs to prepare for future **calls by supporting initiatives that stimulate the participation of Small and Medium Size Enterprises (SMEs) in Slovenia**. Support measures need to demonstrate that Slovenia will **actively develop knowledge and contributions to increase the participation of Slovenian SMEs in the transport research programme**. This is a key action to enhance the Slovenia capabilities in European transport research and to improve the Slovenian transport systems.

www.transslo.com

Thank you for your attention