

Polish Road Transport Technology Platform (PPTTD) in FP7 implementation

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*ERTRAC National Platforms Workshop
Budapest 05.09.2008*



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Lisbon Strategy



Lisbon Strategy

The European Council held a special meeting on 23-24.03.2000 in Lisbon to agree a new strategic goal for the Union in order to strengthen employment, economic reform and social cohesion as part of a knowledge-based economy.



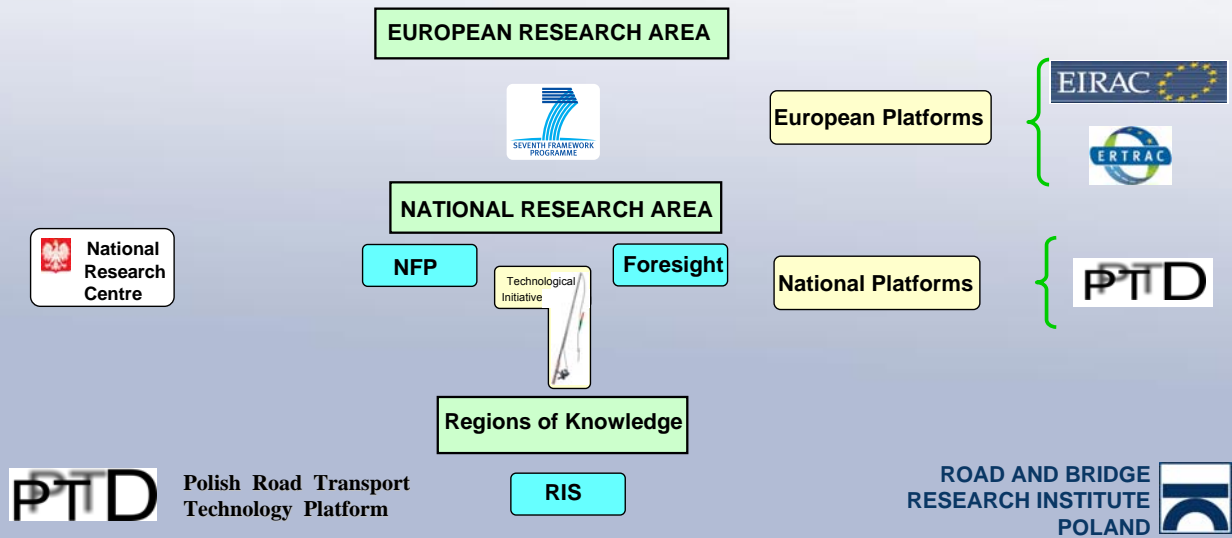
Polish
Lisbon
Strategy



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Correlation of R & D initiatives & institutions



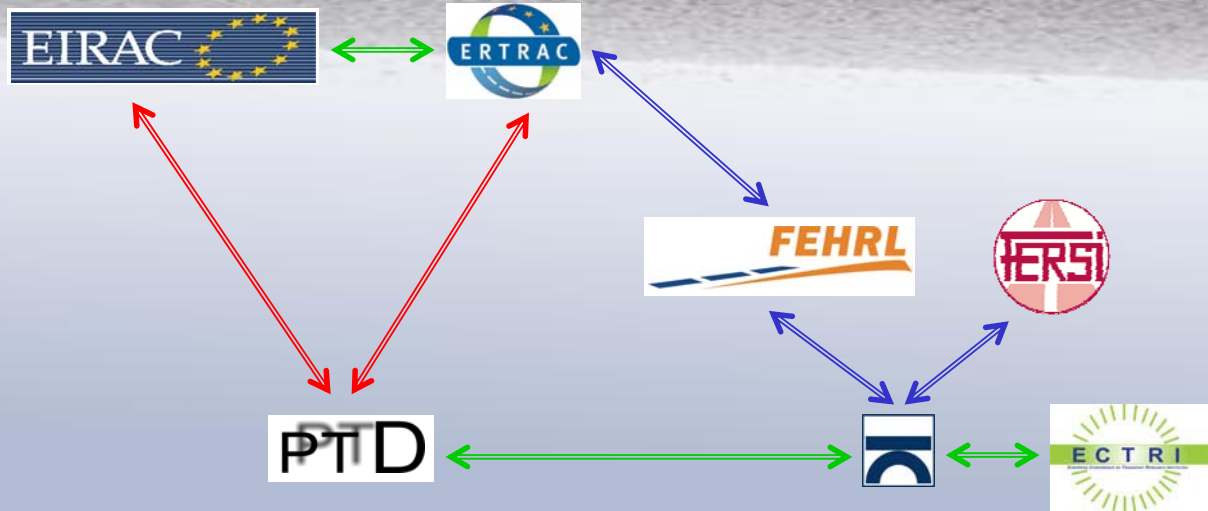
Correlation of Research Areas



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Road and Bridge Research Institute



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Coordinator – The Road and Bridge Research Institute

Prof. L.Rafalski – Coordinator, Dr A.Urbanik – Secretary General

Branch Contact Point led by & located at IBDIM

Participants: 21 institutions and enterprises involved in transport

Main purpose: cooperation of industry and research institutions in
implementation of FP7

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National Frame Programme

- purpose: implementation of the 7 FP in Poland
- 9 strategic research areas, including

IX – Transport Infrastructure

priorities:

- 9.1 Construction, exploitation and safety of transport means and systems
 - 9.2. Management systems of transport processes
- new National Programme of Research and Development 2008



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Priority Research Subjects:

1. Advanced materials and construction technologies in the road & bridge infrastructure
2. Advanced efficient road & bridge infrastructure management systems
3. Intelligent traffic management systems



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Strategic Research Agenda in Road Transport (1)

1. Ultimate construction materials and techniques and advanced approaches to the road and bridge infrastructure maintenance
 - Materials, techniques and processes,
 - Impacts on working environment and on the natural environment,
 - Alternative materials (by-products and industrial waste),
 - Modelling of pavement structures and of engineering structures,
 - Vehicle pavement, vehicle engineering structure interactions,
 - Validation under actual conditions: accelerated testing in actual scale (the use of the research experience and testing equipment in the EU countries),



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Strategic Research Agenda in Road Transport (2)

2. Advanced systems of the effective road and bridge infrastructure management

- Diagnostics
- Management by reliable data from testing measurements
- Weigh in motion vehicle weighing systems (the bridge as a platform weighing machine)
- Own models for the structure degradation conditions which account for the conditions related to:
 - materials
 - engineering
 - climate
 - traffic load
 - Road network and bridge maintenance strategies
 - Traffic safety



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Strategic Research Agenda in Road Transport (3)

3. Intelligent traffic management systems

- Road telemetry and teledetection
- Road sensors
- Road monitoring equipment (mobile and stationary)
- Road teleinformatics
- Data transmission systems
- Expert systems
- Analytical systems
- Real time systems



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Road and Bridge Research Institute in EU Programmes as an example of Polish activity in European R&D



FP5 5 projects



FP6 11 projects



COST 9 projects



EUREKA 4 projects



FEHRL 4 projects



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FP6 projects addressed to new member states of EU

- **ARCHES**
Assessment and Rehabilitation of Central European Highway Structures
- **NETLIPSE**
Network of the dissemination of knowledge on the management and organisation of Large Infrastructure Projects in Europe
- **SPENS**
Sustainable Pavements for European New Member States
- **CERTAIN**
Central European Research in Transport Infrastructure

Euroregional projects for CEC

- **CONNECT**
Coordination and Stimulation of Innovative ITS Activities in Central and Eastern European Countries

The range of development and modernisation projects under the [road infrastructure development programme](#) with the planned expenditure to amount of ca 100 bln PLN for national roads and additionally 70 bln PLN for regional roads, which totally counts to 170 bln PLN (43 bln EUR) and at the same time development of [intermodal transport](#) accompanied by settling a great number of [logistic centres](#) opens up a great opportunity for the development and implementation of the advanced European and world approaches into engineering practice in Poland.

Thank you for your kind attention.