ERA-NET ROAD
Coordination and Implementation of Road Research in Europe
Road Infrastructure Research in Europe

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What do we expect from road infrastructure?

Not feasible with today‘s technologies, innovations are needed!
• **National programmes:**
  – Estimate 150 to 250 million €
• **Regional and bi-lateral cooperation:**
  – Nordic, Baltic
  – German speaking - DE-AT-CH
  – FR-DE
• **Transnational:**
  – The ERA-NET ROAD NRAs made available 12 Million € in the last 3 years for transnational programmes
Financing research in EC

Framework programmes:

- 5th 1998-2002 14.960 billion €
- 6th 2002-2007 17.993 billion €
- 7th 2007-2013 50.521 billion €

• 4.2 billion € for **Transport**
  - app. 2 billion for **Surface transport**
    » A few 10 million € for road infrastructure
      (mainly indirectly through multi-modal projects)
• 2014-2020 Framework Programme for Research and Innovation (~FP8)

• Will build upon the successes of:
  – Framework Programme for Research (FP7),
  – Competitiveness and Innovation Framework Programme (CIP) and
  – European Institute of Innovation and Technology (EIT)

• The ultimate aim is to
  – maximise the contribution of EU funded research and innovation to sustainable growth and jobs and
  – tackle the grand challenges facing Europe – for example climate change, energy and food security, health and our ageing population.
New generation of roads

• Initiative of FEHRL – Europe’s Road Research Centres
• In line with EU objectives
• Practical innovations
• Supported by industry and private sector
• Provide reliable mobility-based user needs and expectations
• Takes into account shrinking public sector budgets
• Three elements:
  – Adaptable road
  – Automated road
  – Climate change resilient road
Coordinated initiatives/programmes:

- **FOR** – Forever Open Road (FEHRL)
- **Cinquième Génération de route** (France)
- **21st century roads** (Germany)
- **Ferry Free E39** (Norway)
Integrated driver/maintenance information system

Measures own Condition

In-built electronic vehicle guidance and power systems

In-built lane and vehicle direction information

Bolt-on lanes and road Infrastructure

Heat storage and energy harvesting

Instant crack repair

Carbon Capture Planting & Devices

Built-in flood resistance

Pre-fabricated

Carbon free construction

Recycled materials
Phase 1
Development of concept – completed in 2010

Phase 2
Definition of amount of necessary research – completed in 2011

Phase 3
Development of all three elements – to be completed in 2013

Phase 4
Demonstration projects – 2013 onwards
Thank you for your attention

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