

Research and Innovation for Europe's future mobility

Developing a European Strategic Transport- Technology Plan

Leipzig, 23 October 2012

Contents of presentation

- The 2011 Transport White Paper
- Urban Mobility
- Research and Innovation for Europe's Future Mobility - towards an STTP
- Proposals to improve the innovation capacity of the transport sector
- STTP and electric urban public transport
- Next steps

The 2011 Transport White Paper

- **Old challenges remain but new ones have come**

Increasing competitive
pressure in the global
economy



Increasing oil price and
persistent oil dependency.
A deteriorating climate and
local environment

Increasing congestion and
poorer accessibility. An
infrastructure gap in the
enlarged EU



The 2011 Transport White Paper

- **Cities and urban mobility**
 - 72% of the European population lives in towns and cities
 - 85% of Europe's GDP is generated in cities
 - One quarter of transport CO₂ emissions comes from urban transport
 - Up to 70% of other pollutants are due to urban traffic



The 2011 Transport White Paper

- **To meet the challenges transport has to**
 - Exploit efficiently a multimodal, integrated and 'intelligent' network
 - Which explicitly includes an urban dimension
 - Develop public transport, especially in urban areas
 - Use less energy
 - Use cleaner energy
- **Governments at all levels have a role to play!**
- **Electric (public) transport is well placed in our policy!**

The 2011 Transport White Paper

- **One CO₂ objective and ten goals**



1. Low emission urban transport and logistics
2. Low-carbon fuels in aviation and maritime transport
3. Freight, modal shift from road transport
4. EU-wide high-speed rail network
5. Multimodal TEN-T core network
6. Long-term comprehensive network
7. Traffic-management systems in all modes
8. Multimodal transport information
9. Close to zero fatalities in all modes
10. Towards 'user pays' and 'polluter pays'

The 2011 Transport White Paper

- **How to do it: 40 actions**

- Infrastructure development
- Internal market
- International cooperation
- Innovation

The Strategic Transport-Technology Plan (STTP) will be the Research and Innovation pillar of the Transport White Paper

- **Action Plan on Urban Mobility (2009): 20 actions**

- specifically addressing urban mobility and transport
- central role for sustainable urban mobility plans
- review ongoing

Commission adopted on 13 September 2012

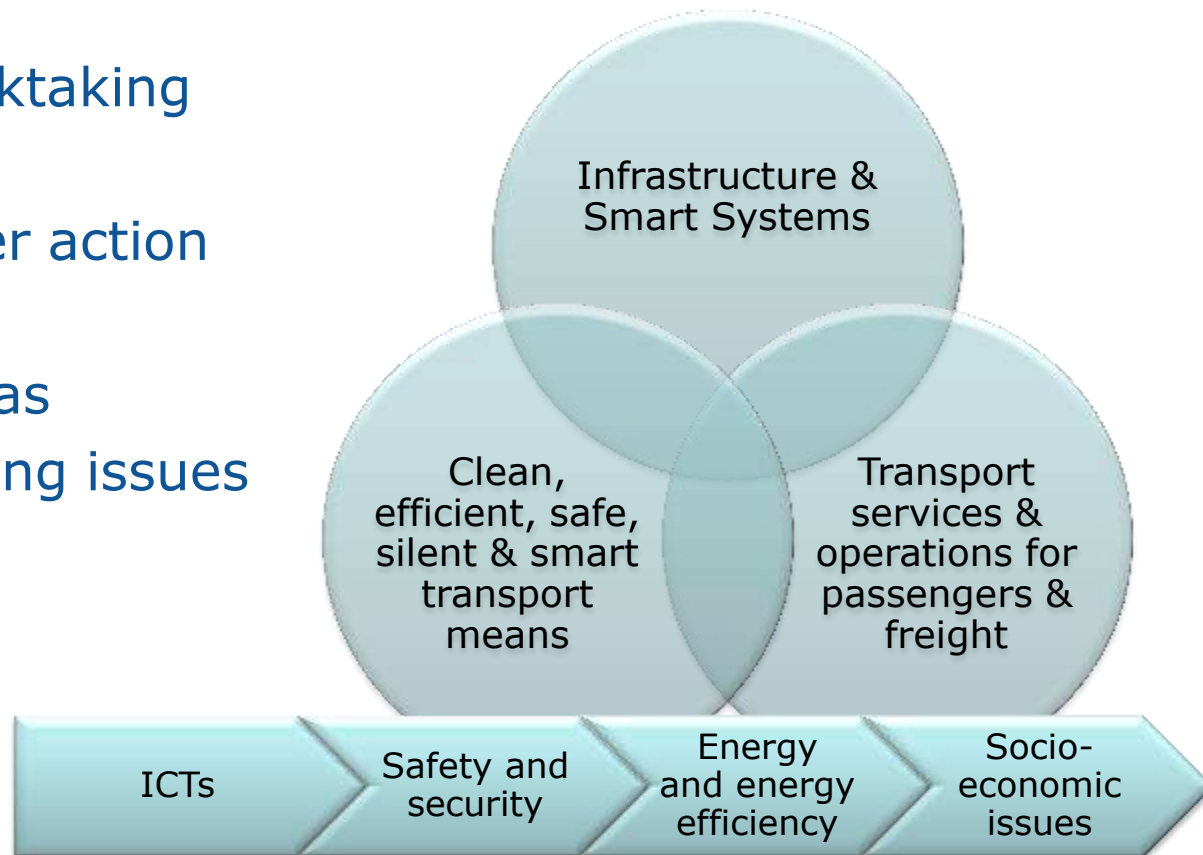
- **Communication: Research and Innovation for Europe's future mobility, Developing a European transport-technology strategy - COM(2012) 501**
- **Staff working document: Preliminary Descriptions of Research and Innovation Areas and Fields, SWD(2012) 260**

DG JRC published two scientific reports:

- *Mapping innovation in the European transport sector*, EC Joint Research Centre, EUR 24771
- *Scientific Assessment of Strategic Transport Technologies*, EC Joint Research Centre, EUR 25211

The communication

- Results of first stocktaking
- Recommendations
- Proposals for further action
- Identifies:
 - Three main areas
 - Four cross-cutting issues



R&I support to the White Paper

- Ten R&I fields

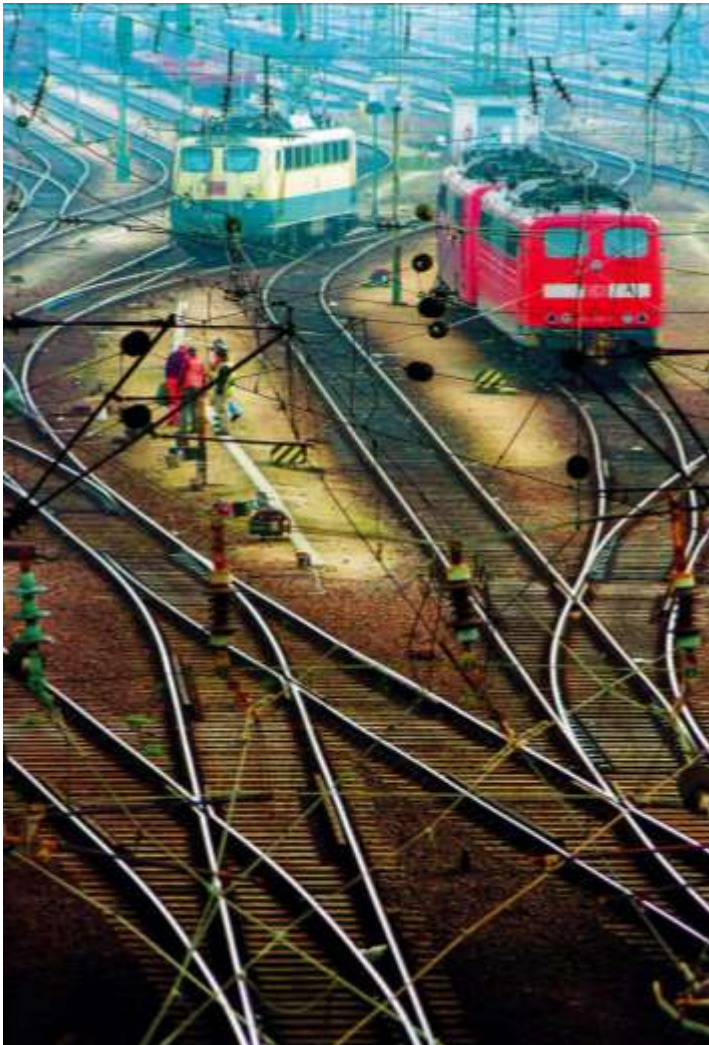


Clean, efficient, safe, quiet and smart transport means	Road vehicles
	Aircrafts
	Vessels
	Rail vehicles
Infrastructure and smart systems	Smart, green, low maintenance and climate-resilient infrastructure
	Europe-wide alternative fuels distribution infrastructures
	Efficient modal traffic- management systems
Transport services and operations for passengers and freight	Integrated cross-modal information and management services
	Seamless logistics
	Integrated and innovative urban mobility and transport

STTP aims at improving the innovation capacity of the sector



- Making transport research and innovation more focused and policy oriented
 - Impact in Horizon 2020,
- Better aligning efforts
- Breaking through technology lock-in
- Efficient deployment of innovative solutions
 - Impact on EU financial/non-financial instruments



Make transport R&I more focused and policy oriented

- Introduce process of common strategic end-to-end programming
- Research and Innovation will be focused on the ten fields identified, for which roadmaps will be prepared

Better align efforts

- Progress on partnerships (public-private and international)
- Improve (integrated) governance of the innovation chain
- Improve monitoring of the development and deployment of innovative solutions (TRIMIS)



Break through technology lock-in

- Exploit convergences between distinct fields (e.g. transport, energy, ICT, etc)
- Design principles and approaches to stimulate entrepreneurship
- Create a new dynamic in transport to make it attractive to talents and entrepreneurs



Ensure efficient deployment of innovative solutions

- Ensure fast and large-scale market uptake and deployment of new technologies
- Improve financial instruments to stimulate diffusion and take up of innovations



The importance of deployment

- Estimated investment needed to achieve emission reduction goals (2010-2030): € 1 trillion
 - This is the amount that EU households spend on transport in one year ...
- The implementation of innovative solutions is needed to achieve policy goals
- How to encourage deployment in future economic climate?

*Stimulating the **deployment of innovation** is necessary in every priority field*



STTP and electric urban public transport

- Communication highlights that public transport will increasingly rely on electricity
- Commission Staff Working Document identifies R&I challenges for electromobility (under road vehicle technologies) and mentions trolleybuses as an example of 'existing concepts' that can be used to increase public transport options (under urban mobility)
- In short term: Horizon 2020
 - Urban mobility under Transport Challenge
 - Smart Cities, joint initiative Energy, Transport and ICT
- In longer term: deployment instruments

Next steps to develop the STTP

- Definition of roadmaps towards the deployment for all fields
- With the participation of industrial, public sector and other stakeholders involved
- Estimate financial needs and identify policy needs
- Establishment of a European Transport Research and Innovation Monitoring System (TRIMIS)
- TRIMIS will publicise the agreed roadmaps and report on the progress of their implementation
- Review progress in 2013



Thank you for your attention!

marcel.rommerts@ec.europa.eu

http://ec.europa.eu/transport/research/sttp/sttp_en.htm

