# Research and Innovation for Europe's future mobility
## Developing a Strategic Transport Technology Plan

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# The 2011 Transport White Paper

*Aims to create a Single European Transport Area:*

- **With more competition**
- **Fully integrated transport network**
- **Leading to a shift in transport patterns for passenger and freight**

*Key goals include:*

- **No more conventional cars in cities**
- **40% sustainable low-C fuels in aviation**
- **40% cut in shipping emissions**
- **50% shift from road to rail and waterborne**
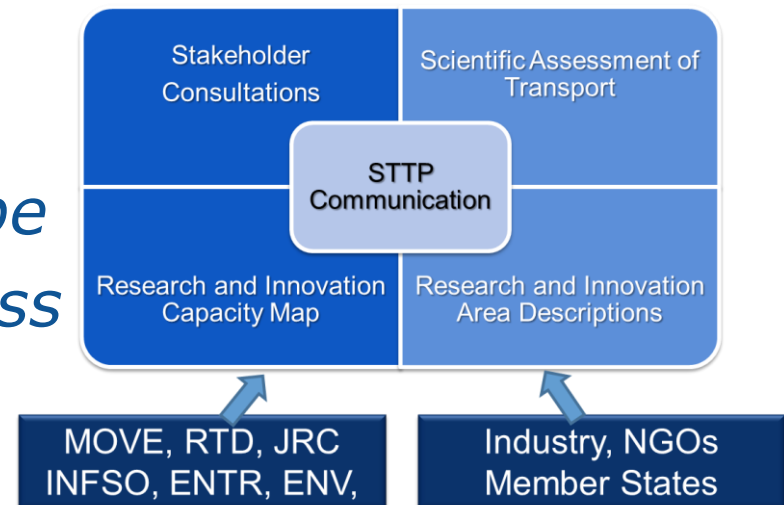- **60% cut in $CO_2$ emissions**

# The 2011 Transport White Paper

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

  - **I**nfrastructure development
  - **I**nternal market
  - **I**nternational cooperation
  - **I**nnovation

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

# STTP process and participants

- ➢ *Started in winter 2010 involving:*
- ➢ *Relevant European Commission services (MOVE, RTD, JRC,…)*
- ➢ *Scientific Expert Panel*
- ➢ *EU Member States*
- ➢ *Major stakeholders in Europe*
- ➢ *Iterative consultation process*



Stakeholder Consultations

Scientific Assessment of Transport

STTP Communication

Research and Innovation Capacity Map

Research and Innovation Area Descriptions

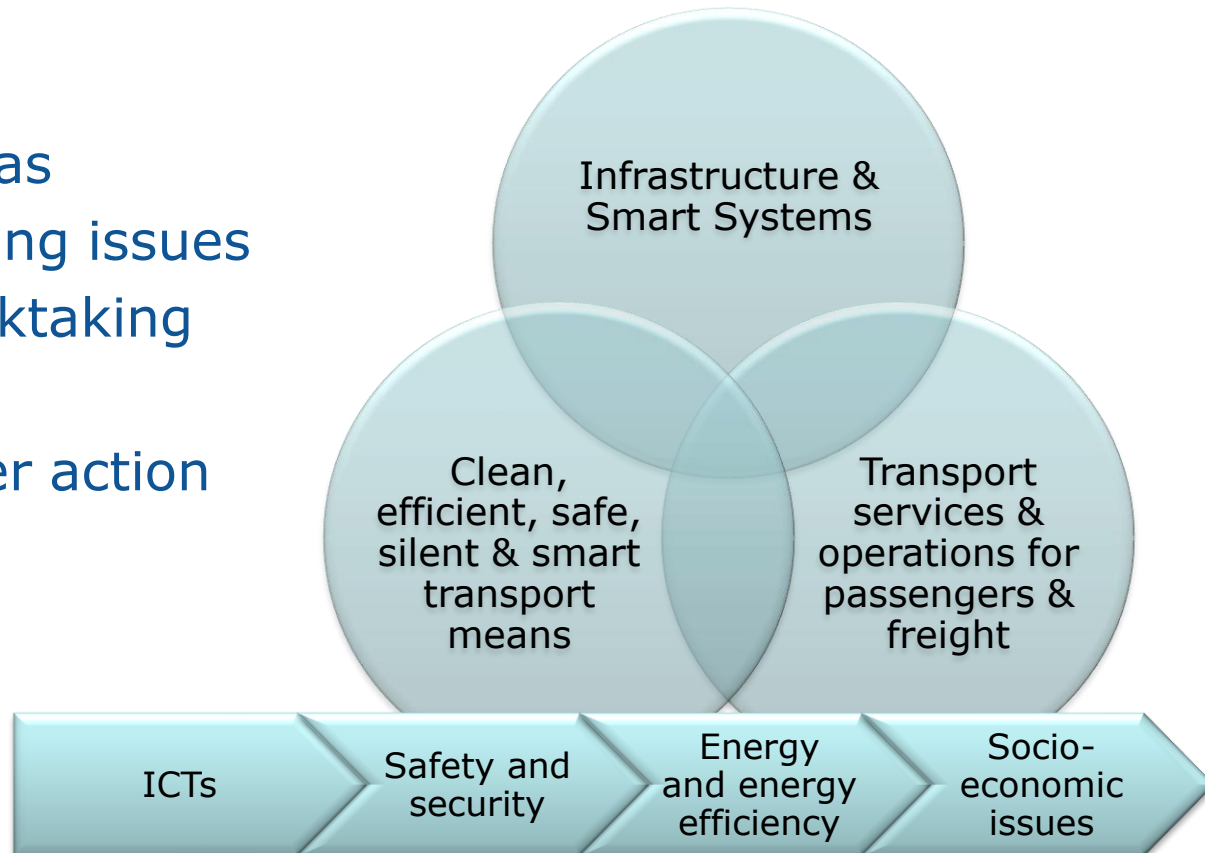MOVE, RTD, JRC INFSO, ENTR, ENV,

Industry, NGOs Member States

# EC adopted in 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

# The Communication

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

Infrastructure & Smart Systems

Clean, efficient, safe, silent & smart transport means

Transport services & operations for passengers & freight

ICTs

Safety and security

Energy and energy efficiency

Socio-economic issues

Transport

# Ten Research and Innovation 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 (roadmaps)

- 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*

# Next steps to develop the STTP

- Definition of roadmaps towards 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 continuously

# Tentative Priority list for Roadmaps

- Test Case: Electrification of Road Transport
  - Target: "advanced draft" mid-2013

- Subsequent Roadmaps for 2013:
  - Rail
  - Logistics
  - Infrastructure
  - ITS

# Roadmap considerations

- STTP Roadmaps will cover following items:
  - Broad stakeholder consultation
  - Not just R&I but including **deployment!**
  - Look at problems at **systems** level
  - Links with relevant other roadmaps/areas
  - Targets at intermediate stages
  - Cost estimates

# Thank you for your attention!

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