
ASSIST

ASSessing the Social and economic Impacts of past and future Sustainable Transport policy in Europe

Impact of future challenges on EU transport policy

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Outsmarting the future?



Turning to the past, present and future

- **What patterns do we see?**
- **How did the patterns evolve over time?**
- **Where are we now?**
- **How will these patterns evolve into the future?**

- **WHAT ARE THE TRENDS OR FUTURE CHALLENGES?**

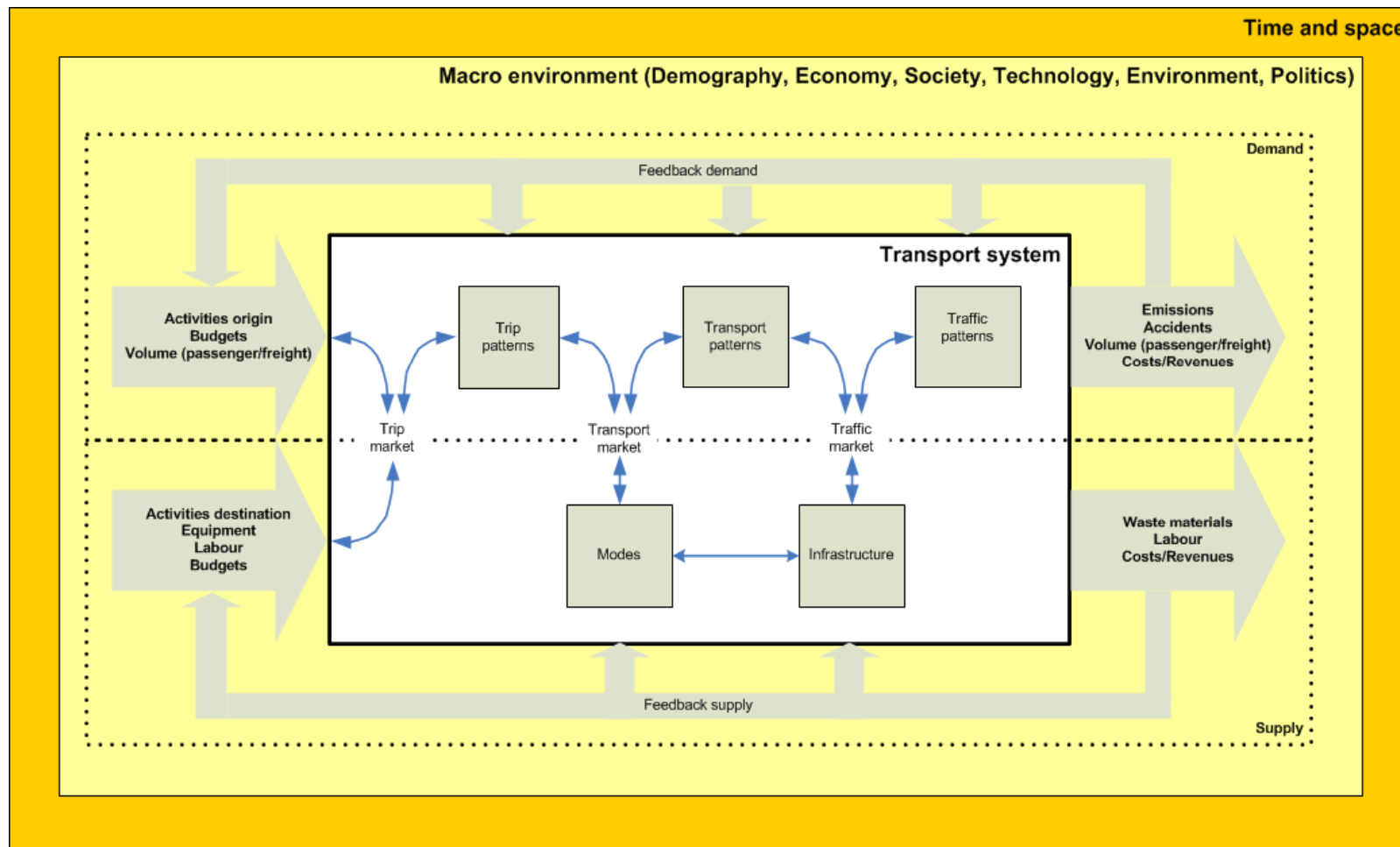


What challenges are important for transport?

- Fighting climate change
- Shortage of fossil fuels and other natural resources
- Increasing air pollution and noise
- Urbanisation and sprawling
- Ageing of the European society
- Migratory pressure
- Unemployment
- Income inequality or income distortions
- Terrorism and the feeling of insecurity
- Individualism
- Diffusion of ICT
- Third manufacturing revolution
- Globalisation and outsourcing
- Public and private debt
- Fragility of the European Monetary Union



Transport system and its macro-environment



Impact of selection of future challenges on the transport system

Challenge	Trip market	Transport market	Traffic market
Fighting climate change	Passenger & freight trip patterns	Transport means and services	Infrastructure and its attributes
Shortage fuel and resources	Passenger & freight trip patterns	Passenger & freight transport patterns Transport means and services	Passenger & freight traffic patterns Infrastructure and its attributes
Increasing pollution and noise	Spatial and temporal structure of society	Transport means and services	Infrastructure and its attributes
Urbanisation and sprawling	Passenger & freight trip patterns	Passenger & freight transport patterns	Infrastructure and its attributes
Ageing	Passenger trip patterns	Passenger transport patterns Transport means and services	Passenger traffic patterns Infrastructure and its attributes



Selection of policy categories with impact on the transport system

TPM category	Trip market	Transport market	Traffic market
Pricing		Passenger & freight transport patterns	Passenger & freight traffic patterns
Taxation	Passenger & freight trip patterns	Passenger & freight transport patterns	
Research and innovation	Passenger & freight trip patterns Spatial and temporal structure of society	Passenger & freight transport patterns Transport means and services	Passenger & freight traffic patterns Infrastructure and its attributes
Efficiency standards and flanking measures		Passenger & freight transport patterns Transport means and services	
Internal market	Spatial and temporal structure of society		
Infrastructure			Passenger & freight traffic patterns Infrastructure and its attributes



Potential magnitude of selection of challenges on TPM categories

Implication for → Challenge ↓	Pricing	Taxation	Research and innovation	Efficiency standards	Internal market	Infrastructure	Transport planning
Fighting climate change	+	++	++	++	0	++	++
Shortage fuel and resources	+++	+++	++	+++	+	+++	+++
Increasing pollution and noise	+	+	+	+	0	+	+
Urbanisation and sprawling	+	++	+	+	+	++	++
Ageing	+	++	+	+	+	++	++
Migratory pressure	+	+	0	+	0	+	+
Unemployment	+	+	+	+	0	+	0



Example Energy Taxation Directive (2003/96/EC)

Description

The Energy Taxation Directive (2003/96/EC) introduces a minimum rate system for all energy products, including coal, natural gas and electricity.

It contains incentives to use energy more efficiently and to allow Member States to offer tax incentives to reduce emissions

Goal

To reduce distortions of competition between Member States and between oil and other energy products.

Main impacts from

Fossil fuel shortage, Globalisation, Urbanisation, Outsourcing, Diffusion of ICT



Impacts on Energy Taxation Directive (2003/96/EC)

- **Fossil fuel shortage:** Reviewed in the light of fossil fuel shortage, on mid-long term. Need for incentives to use energy more efficiently.
- **Outsourcing:** Streamlines processes in companies, but is also increases the distances travelled and energy use. Energy taxation makes transport more expensive. Therefore it contributes to the overall decision whether to undertake outsourcing or not.
- **ICT:** No direct implication for the Directive. However, the developments may make it easier to enforce the Directive
- **Globalisation:** Globalisation will enforce transport by air and maritime shipping. These two modes are not included in the Directive, but action might be undertaken at international level to reduce distortions
- **Urbanisation:** Increased urbanisation leads to a concentration of economic and transport activity. On the other hand, sprawling increases trip lengths of commuters and thus increases transport and energy use. Additionally, residents of more rural areas are more affected due to lack of alternatives (less public transport)



Conclusions and recommendations

Conclusions

- Most important future challenges for transport system and transport policy are Fossil
- Fuel shortage and Diffusion of ICT
- Moderate impacts expected from Climate change, Ageing, Public and Private Debt, Globalisation, Outsourcing, Fragility of EMU and Urbanisation
- Transport policies are in some cases good, some need more attention (promotion of telework) while others need to be reviewed in the light of future challenges

Recommendations

- Further explore and quantify the implications of the future challenges
- Make policy responses a combined effort of the different DGs of the EC. After all, the transport system is a derived system, dependent on its macro-environment
- Monitor the developments in the macro-environment and adapt policy to it whenever it is needed



Example Road Safety Action Programme (RSAP)

Description

RSAP proposes a series of measures to improve road safety (such as improvement road safety technologies, improve road users behaviour, improvement infrastructure)

Goal

Reduction of casualties

Main impacts from

Ageing



Impacts of future challenges on RSAP

Ageing: Due to more aged persons, the RSAP might be reviewed in the light of elderly people. Can they for example improve their behaviour?



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