

# ASSIST

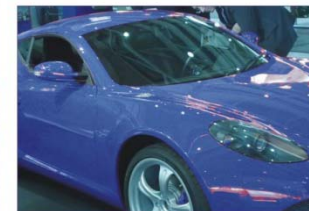
ASSessing the  
Social and economic  
Impacts of past and future  
Sustainable  
Transport policy in Europe



## Synopsis of ASSIST findings - Social and economic impacts of transport policy

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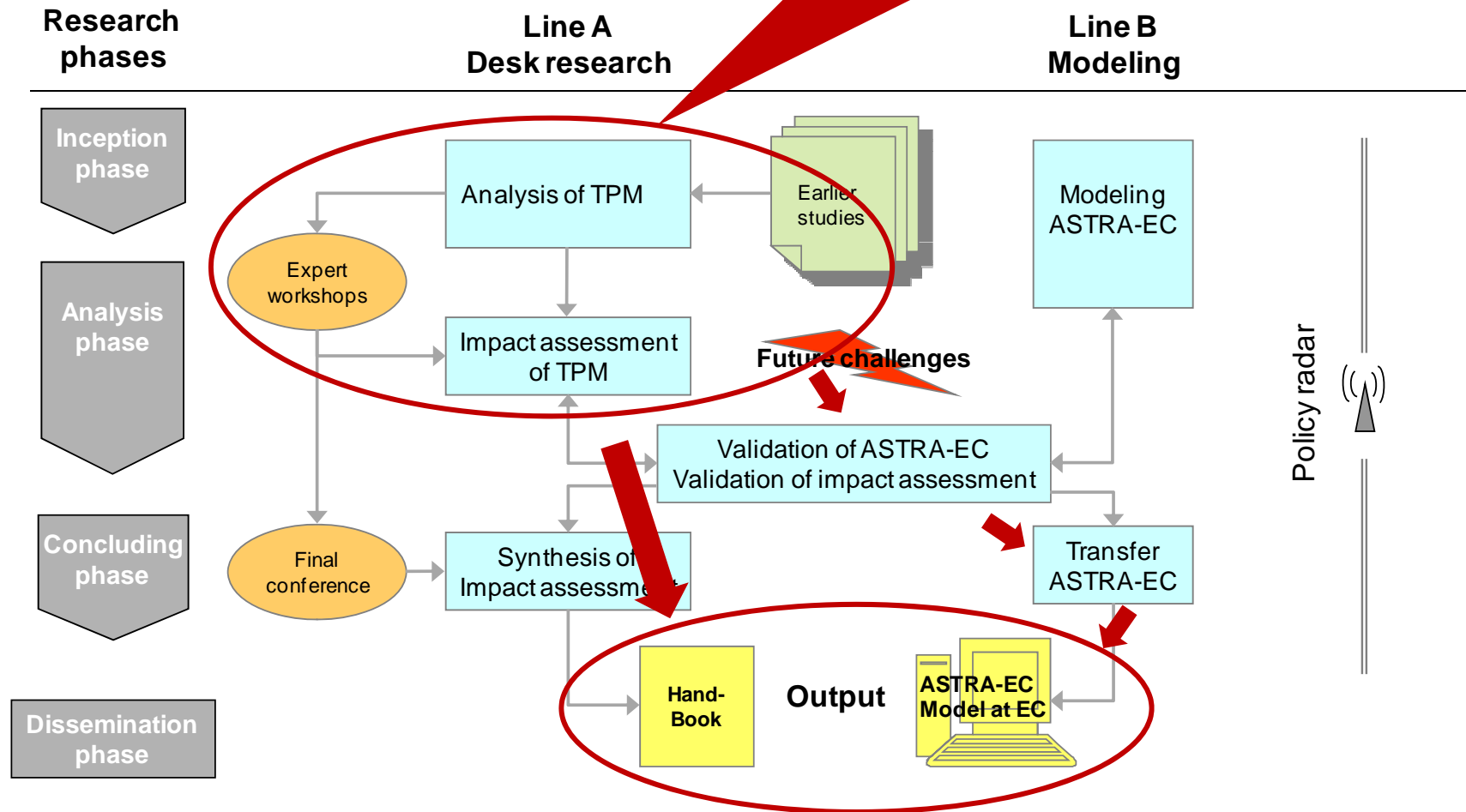
# Synopsis of ASSIST findings - Social and economic impacts of transport policy

- 1. ASSIST WP2 approach**
- 2. Transport Policy Measures**
- 3. Impact assessment**
- 4. Fact sheets**
- 5. Main findings**



# 1. ASSIST WP2 approach

Work package 2  
Impact Assessment  
of transport policy measures



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## 2. Transport Policy Measures

### Identification of transport policy measures

#### A Transport Policy Measure (TPM)

is transport policy made by the EC, usually issued as Directive or Regulation.

#### Examples:

- Directive 91/440 on the Development of the Community's Railways
- Directive 99/62 on the charging of heavy goods vehicles

The TPMs and their categorisation are related to the EU 2011 Transport White Paper.

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## 2. Transport Policy Measures

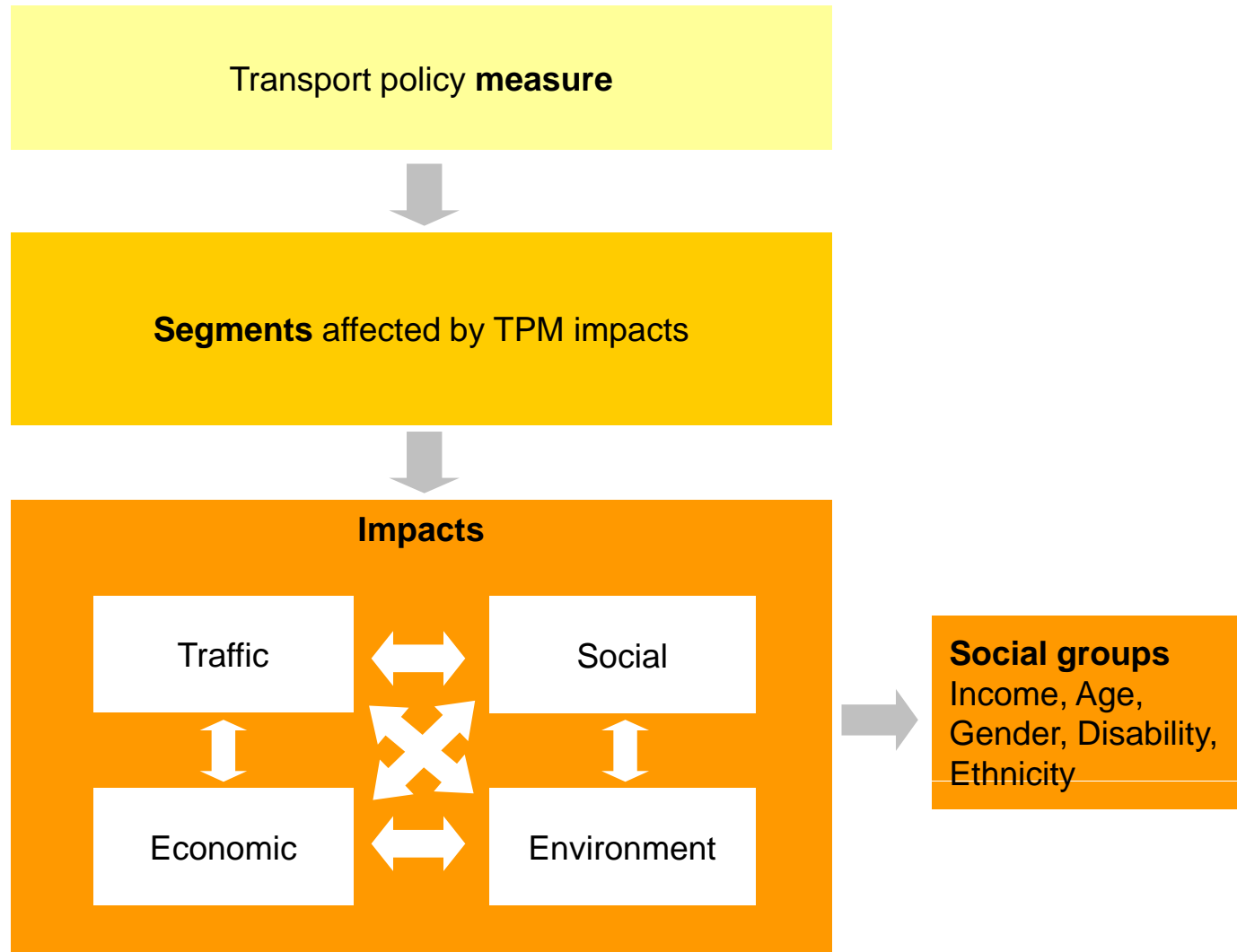
### White Paper categories

**61 Transport policy measures** were allocated to **eight categories** according to the EU 2011 Transport White Paper

Category	Exemplary TPM
1 Pricing	<ul style="list-style-type: none"><li>• Eurovignette</li><li>• Environmentally differentiated landing fees</li></ul>
2 Taxation	<ul style="list-style-type: none"><li>• CO<sub>2</sub> based annual vehicle circulation tax (CO<sub>2</sub> taxation)</li><li>• Company car taxation</li></ul>
3 Infrastructure	<ul style="list-style-type: none"><li>• Green transport corridors</li><li>• Reduction of TEN-T missing links</li></ul>
4 Internal markets	<ul style="list-style-type: none"><li>• Single European Sky II</li><li>• EU-wide common job quality and working conditions for truck drivers</li></ul>
5 Standards and flanking measures	<ul style="list-style-type: none"><li>• Introduction of speed limitation of light commercial vehicles (LCV)</li><li>• Safety of road transport by means of ITS (Intelligent car initiative (e-Safety initiative))</li></ul>
6 Transport planning	<ul style="list-style-type: none"><li>• Introduction of city logistics / urban freight distribution</li><li>• Low emission zones / Environmental zones</li></ul>
7 Research and Innovation	<ul style="list-style-type: none"><li>• H<sub>2</sub> fuel cell vehicles</li><li>• Technological improvements regarding e-mobility charging systems</li></ul>
8 Others	<ul style="list-style-type: none"><li>• Teleworking</li><li>• Flexible working hours</li></ul>

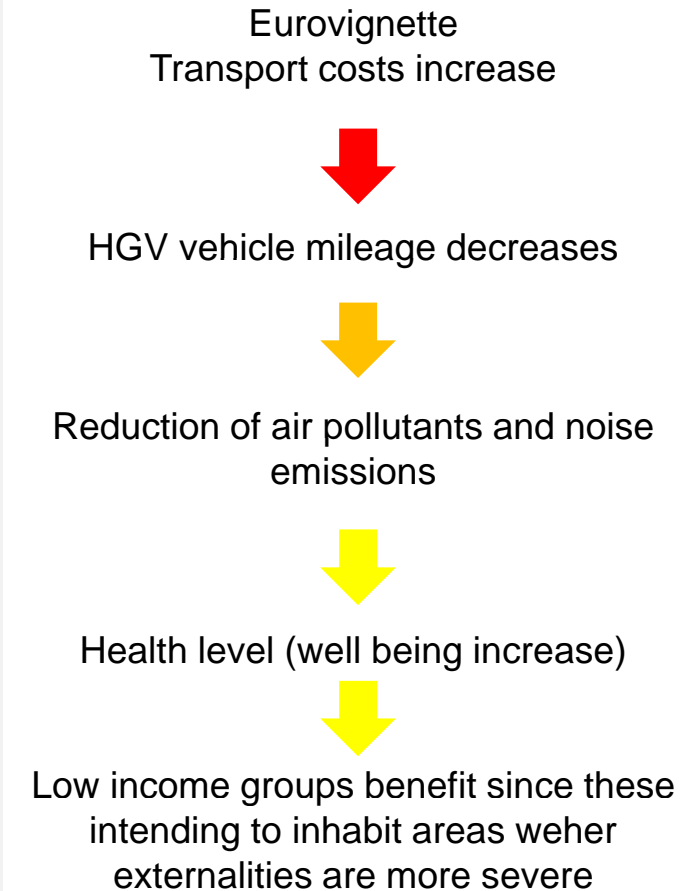
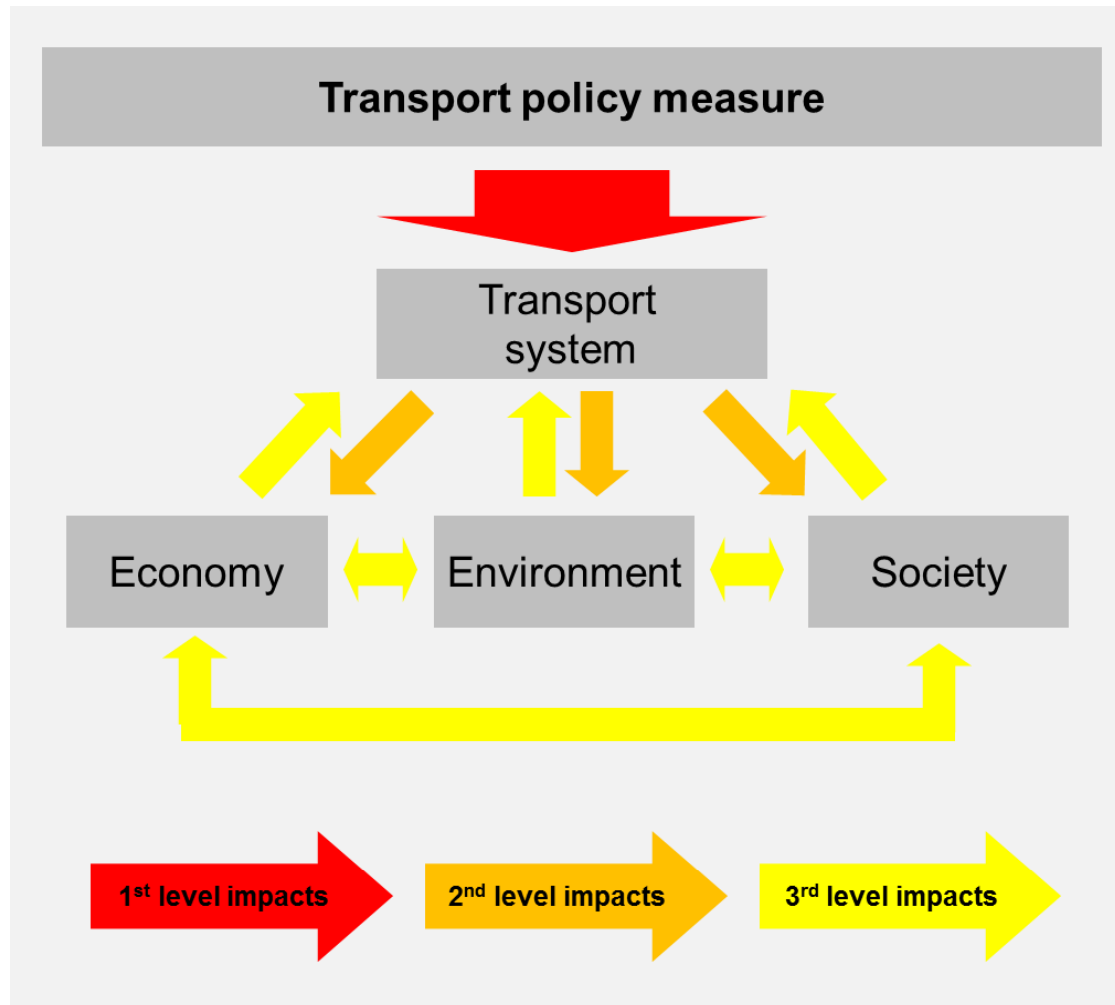
### 3. Impact assessment

#### Impact assessment analysis flow



### 3. Impact assessment

#### Impact assessment analysis flow



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### 3. Impact assessment

#### Impact assessment - segments

Segments affected by impacts
Passengers (road, rail, air, public transport, slow modes)
Transport operators (road, rail, inland waterway, air, maritime, public transport)
Employees in the transport sector
Residents
Economy
Public bodies
Society



## 4. Fact sheets

### Fact sheets

#### General Information

- Description of TPM
- Implementation examples (if any)
- Objectives
- Transport relevant key changes

#### Impacts

- Overview of impacts (summary)
- Summary of impacts on **social groups** (income, age, disabled, gender, ethnology)
- **Economic impacts** (e.g. transport costs, private / commercial income, sectoral / spatial competitiveness, revenues ...)
- **Social impacts** (e.g. health, safety, security, accessibility, social, inclusion, employment ...)
- **Environmental impacts** (air, noise, land-use, visibility of landscape, climate, resources)

B.3	ECONOMIC IMPACTS	AFFECTED SEGMENTS													Geographi- cal level			Source		
		Passengers					Transport operators								Int'l level	Natl level	Sectoral / sub-sectoral			
		Road	Rail	AV	Public transport	Slow modes	Road	Rail	AV	Market	Public transport	Employees in transport	Readers	Economy					Public bodies	Society
B.3.1	Transport costs	R																		
B.3.2	Private income / commercial turn over																			
B.3.3	Revenues in the transport sector																			
B.3.4	Sectoral competitiveness																			
B.3.5	Spatial competitiveness	R																		
B.3.6	Housing expenditures																			
B.3.7	Insurance costs																			
B.3.8	Health services costs																			
B.3.9	Public authorities & adm. burdens on businesses																			
B.3.10	Public income (e.g. taxes, charges)																			
B.3.11	Third countries and international relations																			
B.3.I	Overall impacts on social groups																			
B.3.II	Implementation phase																			
B.3.III	Operation phase																			
B.3.IV	Summary / comments concerning the main impacts	<ul style="list-style-type: none"> <li>- There is a variety of charging aims: reduce car traffic, reduce emissions, finance public transport, create additional revenues, or a mix of these.</li> <li>- Depending on the political objective, public transport, society and/or public bodies benefit from the policy measure.</li> <li>- In general when charged, road transport costs will increase, public transport and slow modes become more attractive and competitive.</li> <li>- Spatial competitiveness between restricted and non-restricted areas will increase. For example, discretionary trips (like shopping) might be redirected to other locations.</li> <li>- Due to the charges, sectoral competitiveness between transport operators in restricted and non-restricted areas will increase.</li> <li>- No elasticities available. The variety of charging aims, the variety of locations and area size, make it not possible to produce elasticities.</li> </ul>																		
B.3.V	Quantification of impacts																			
B.4	SOCIAL IMPACTS	AFFECTED SEGMENTS													Geographi- cal level			Source		
		Passengers					Transport operators								Int'l level	Natl level	Sectoral / sub-sectoral			

## 4. Fact sheets

### Fact sheets structure – Example Eurovignette

B 3	ECONOMIC IMPACTS	AFFECTED SEGMENTS														Geographical level		Source				
		Passengers					Transport operators						Employees in transport	Residents	Economy	Public bodies	Society	1st level	2nd level	Source of assessment	Spatial level of source	
		Road	Rail	Air	Public transport	Slow modes	Road	Rail	IWW	Air	Maritime	Public transport										
B 3.1	Transport costs					↘													N		S	I
B 3.2	Private income / commercial turn over														↘				L	R	E	I
B 3.3	Revenues in the transport sector					↘													L	R	S	I
B 3.4	Sectoral competitiveness					↘	↗	→									↘		L	R	E	
B 3.5	Spatial competitiveness					↘													N		E	I
B 3.6	Housing expenditures																					
B 3.7	Insurance costs																					
B 3.8	Health service costs																					
B 3.9	Public authorities & adm. burdens on businesses					↘									↘				L	R	E	
B 3.10	Public income (e.g.: taxes, charges)																		N	R	S	N
B 3.11	Third countries and international relations																					

**Arrows** depict the intensity of a change affected by a TPM

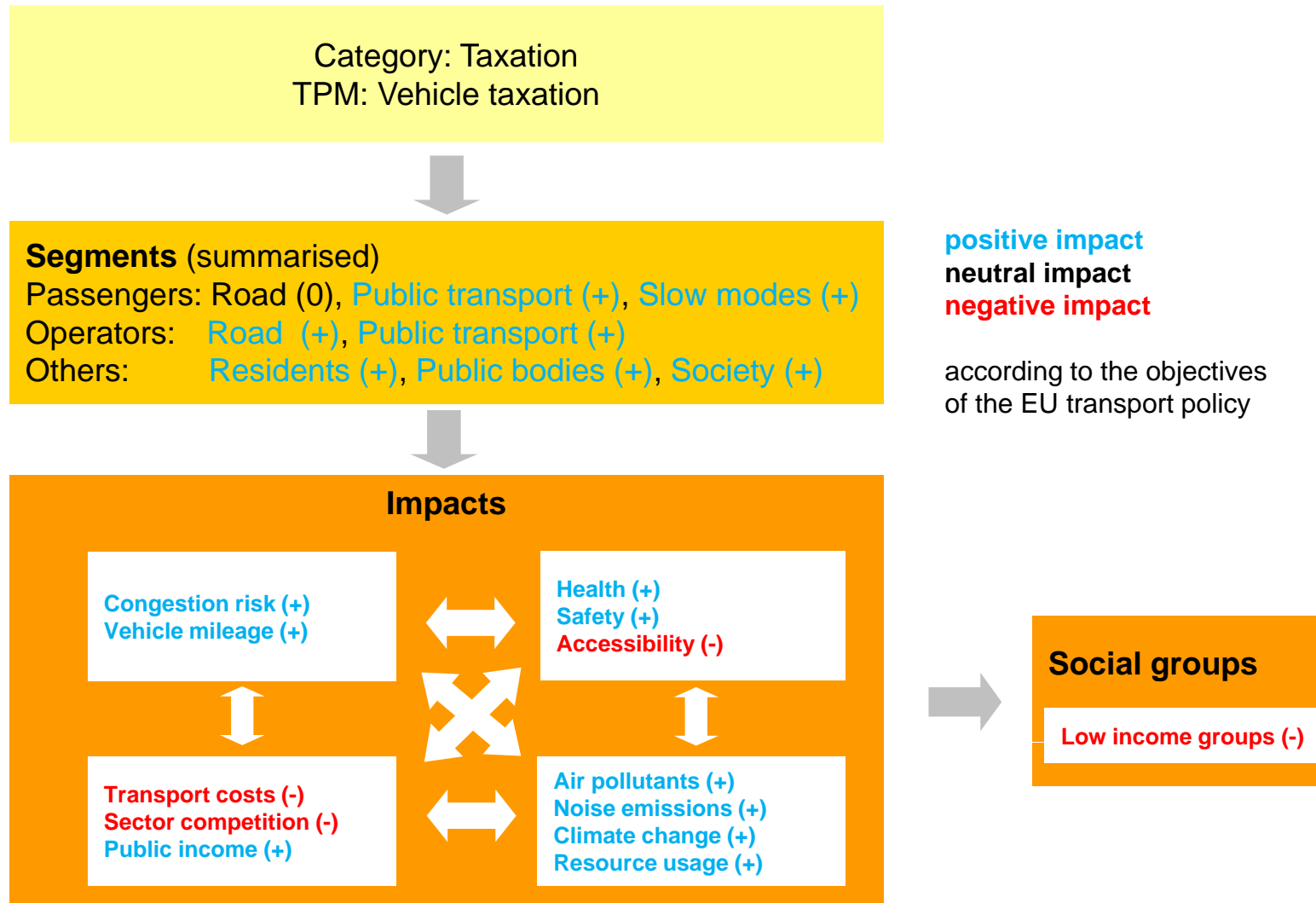


**Coloured fields** depict the impact of a TPM

- negative impact of TPM (with respect to the European transport policy objectives)
- neutral impact of TPM (with respect to the European transport policy objectives)
- positive effect of TPM (with respect to the European transport policy objectives)

## 4. Fact sheets

### Example: Affected segments and impact fields



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## 5. Main findings

### General impacts

**General** findings resulting from the impact assessment :

The extent of impacts of individual TPMs strongly depends on

- the geographical area (scale),
  - the individual design
  - the implementation at national level
- 
- Mostly income groups are affected
  - 25 TPM have impacts on income groups, the positive/negative ratio is balanced

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## 5. Main findings

### Economic impacts

- The most frequently affected: transport operators, clearly positively influenced by:
  - **'E-Freight'** and
  - **'End-to-End'** security certificates.
- **Pricing and taxation** measures challenge transport operators, users and the economy as a whole.
- **Transport costs, competitiveness and revenues** in the transport sector are the economic impacts most frequently addressed by the selected TPMs.
- **'End-to-end security certificates', 'E-freight and 'Elimination of TEN-T bottlenecks'** are assumed to have the most positive economic impacts on
  - transport costs,
  - revenues,
  - spatial and sector competitiveness and
  - insurance costs.

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## 5. Main findings

### Social impacts

- Positive impacts in social terms are **mostly expected for residents, the society, the economy, employees and public bodies.**
- Especially measures with undisputable benefits for these groups are:
  - ‘SESAR’
  - ‘End-to-End security certificates’
  - ‘low emission zones’ as well as the
  - ‘European Rail Traffic Management System (ERTMS)’
- Many TPMs contribute to improve **safety and health**; by far the most (positively) affected social impact fields.
- There is **no transport policy measure** which affects the cultural heritage or culture in general.
- To summarise, transport policies do not adversely affect societal issues or specific social groups. **Only a very few measures have effects on specific social groups.**

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## 5. Main findings

### Environmental impacts

- Almost 95% of all impacts are environmentally positive.
- The TPMs investigated will help significantly to reduce air pollutants and noise emissions.
- Measures allocated to ‘transport planning’ like
  - ‘Influencing demand for sustainable transport – promotion of cycling within urban / suburban areas’,
  - ‘City logistics’)and ‘infrastructure’ like
  - ‘Reduction of TEN-T missing links’,
  - ‘Green transport corridors’,
  - ‘Deployment of roadside-based ITS infrastructure for information services’have the most frequent environmental impacts.
- The TPMs ‘**Noise emissions restrictions**’ and ‘**Park and ride systems**’ are the measures with the most positive impacts on the environment.
- In contrast, the visual quality of the landscape and the land use are least affected by transport policy measures.

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**Many thanks for your attention!**





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## Backup - Sectoral competitiveness

### A. Approach to identify and determine sectoral competitiveness

Identification of impacts in the field «sectoral competitiveness» within factsheet



**INTRA-SECTORAL**  
Assessing the impact  
**within** the transport sector



**INTER-SECTORAL**  
Assessing the impact  
**between** (economic) sectors



Consolidation of impacts  
affecting the segments **passengers** /  
**transport operators** for each category



Consolidation of impacts  
affecting the segments **transport**  
**operators / economy** for each category

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## Backup - Spatial competitiveness

### B. Approach to identify and determine spatial competitiveness

Selection of impact field «spatial competitiveness» within each factsheet (B3.5)



**Local, Regional, National and International Competitiveness**  
Assessing the impact of a TPM upon productivity, employment and income  
at the four geographical levels



Consolidation of impacts affecting the segments **society** and **economy**