RESULTS OF THE CONSULTATION ON THE INTERNALISATION OF EXTERNAL COSTS

NOTICE

This is a working document prepared by the services of the European Commission to support the preparation of an impact assessment on the internalisation of external costs. The views expressed have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's views. Neither the European Commission nor any person acting on its behalf is responsible for the use which might be made of the information contained in this document. Nobody can claim any rights from its contents.
1. BACKGROUND

The Commission is currently developing a model for the assessment of external costs of transport. This was requested by the European Parliament when it approved the ‘Eurovignette’ Directive in May 2006 which states that: “No later than 10 June 2008, the Commission shall present, after examining all options including environment, noise, congestion and health-related costs, a generally applicable, transparent and comprehensible model for the assessment of all external costs to serve as the basis for future calculations of infrastructure charges”. The Directive adds that: “This model shall be accompanied by an impact analysis of the internalisation of external costs for all modes of transport and a strategy for a stepwise implementation of the model for all modes of transport. The report and the model shall be accompanied, if appropriate, by proposals to the European Parliament and the Council for further revision of this Directive”.

The Commission is now carrying out an impact assessment which will support the strategy on internalisation of external costs. To this end, a consultation paper (available at http://ec.europa.eu/transport/costs/consultations/index_en.htm) has been prepared and an on-line questionnaire was submitted.

The consultation started on 29 October 2007 and closed on 31 December 2007. The questionnaire received 469 replies and 16 position papers on the matter were submitted in the meantime.

This document describes the main results of the replies and position expressed to the Commission.

2. GENERAL INFORMATION ON RESPONDENTS

Out of the 469 respondents, 68% were individual respondents and 31% were organisations. Among the individuals, many are young people. Most come from the EU. The majority of the respondents live in cities (metropolitan or towns). They use car and public transport for their daily mobility and use train, car and planes for longer journeys.

As regards organisations, most of them are professional organisations. All modes of transport are represented.

3. EXTERNAL COSTS OF TRANSPORT

The questionnaire¹ asked the participants to rank the following external costs – congestion, accidents, noise, air pollution, climate change – according to their magnitude. According to respondents, environmental costs – air pollution, climate change, noise – are the most important nuisances in transport (in all modes).

The picture slightly differs across modes of transport. In road transport, air pollution and congestion appear as the most important nuisance for the majority of respondents. In railways, noise is seen as the most serious one. In aviation, environmental costs – noise,

¹ See Annex 1 the full Questionnaire.
air pollution and climate change – are considered as the most important while air pollution and climate change have been ranked first in maritime and inland waterways.

**Graph 1a**

![Graph 1a](image)

**Graph 1b**

![Graph 1b](image)

**Graph 1c**

![Graph 1c](image)
4. **WHAT ARE THE MAIN EXPECTATIONS OF INTERNALISATION OF EXTERNAL COSTS?**

The primary objective of the internalisation of external costs is to ensure that the prices paid by transport users reflect the costs they generate, including external costs. More than 80% of all respondents agree or agree strongly with the principle of internalising external costs generated by transport.
Participants were asked to express their views on the main expectations they have with regards to internalisation. More specifically, they were asked to describe advantages and disadvantages of internalisation for the economy, society and the environment.

**Advantages/Disadvantages for the economy**

According to respondents, increased **efficiency** is one of the most important expectations. The internalisation of external costs is seen to allow the elimination of market failures and the improvement of the allocation of resources. It would decrease distortions of prices created by the fact that users do not always bear the full costs of their decisions. Efficiency is also considered to mean more efficient use of transport and then a decrease in logistics costs.

Respondents also expect **local production to increase**. In other words, the internalisation of external costs could lead to the relocation of activities from third countries to EU, which would benefit the whole economy.

Among the concerns expressed, appears the **increase in costs of transport** which could affect European competitiveness. It could also favour inflation and have negative effects on the aggregated demand. In addition, a reduction of mobility could also affect the freedom of circulation of people and goods.

Some of the respondents highlighted the need to make a thorough impact assessment on these effects. Moreover, they stressed the need to take into account existing charges and taxes.

**Advantages/Disadvantages for society**

In general, respondents think that the advantages for society would be important. Most of them expect a reduction of nuisances and an improvement of the quality of life, as well as positive effects on public health and road safety. The internalisation of external costs would lead to **promote fairness in society** to the extent that transport users would bear all the external costs they generate.

Some respondents have highlighted that low income social categories are the most affected by nuisances (living near noisy and polluted areas). If those nuisances are reduced, these categories would benefit the most from it.

As regards social effects, on one hand, respondents think that the development of new activities (due to increased attention to environment) could create new jobs. On the other, if is feared that the loss of competitiveness due to increased costs could lead to job losses.

Investment in public transport is considered to improve equity and favour low revenue social categories.

**Advantages/Disadvantages for the environment**

Respondents expect environmental nuisances to decrease. It is hoped air pollution, noise, congestion and accidents could be reduced and that the use of cleaner modes of transport – public transport, cycling and walking – would also contribute to reducing environmental nuisances.
According to participants, the internalisation of external costs could lead to modal shift in favour of cleaner modes of transport. Therefore, the impact on environment would be positive and a reduction of externalities could be expected.

Not all respondents, however, agree that internalizing external costs would have a positive impact on environment. Some of them consider that increased transport prices would not imply a significant decrease of traffic flows; therefore, the impact on environment would be negligible.

How could the negative effects be reduced?

Very often, respondents consider that pricing is a good instrument. However, for many of them pricing should be part of a combination of other policies. Technology policy is identified as an important one as innovation is one of the key drivers to reduce externalities. Many think the policy mix should also include "classic" instruments such as traffic management, provisions for car-free city centres, etc. Standards also play an important role. In addition, it has been emphasized that one should not underestimate the positive role of investing in infrastructure and in public transport.

Public transport, especially in urban areas, is considered a key point to develop clean transports and sustainability.

5. HOW TO INTERNALISE? POLICY OPTIONS TO INTERNALISE

The consultation paper describes possible ways to internalise using options to use economic instruments for each external costs – charge, tax and tradable permits. All these instruments have their own advantages and disadvantages and can be adapted to deal with specific external costs.

Congestion costs

Most of respondents welcome the internalisation of congestion costs. They stress that congestion is mostly a local or regional problem and this needs to be taken into account. Respondents also highlighted the need of harmonisation at EU level. Complementary instruments such as the development of the infrastructure network and information technology were also mentioned in the comments. As regards congestion in road, participants seem to prefer charging for all users – passenger and freight – rather than charging only freight. In scheduled transport, participants recalled that congestion charging is already implemented in some airports or within the existing railways directive.

Some of the respondents, however, did not agree on congestion costs being an externality, as they claim these costs (time loss) are already internalized amongst road users themselves.
Accident costs

In general, respondents favour taking into account accidents when internalising. Moreover, the majority would like this internalisation in all modes of transport, and not only in road transport.

However, some participants were opposed to this arguing that these costs are already internalised through insurance prices. Some stressed that instruments such as controls, penalties and information campaigns would be more efficient to deal with accidents.

Noise costs

Participants welcome the internalisation of external costs in the field of noise. Many of them stressed that noise restrictions or charges were already applied in some airports or by infrastructure managers in railways. Technology was also mentioned as a key element to fight against noise. Some respondents have the feeling that noise costs are already internalized via lower land prices in the proximity of noisy transport infrastructures.
Air pollution costs

Most of respondents think that differentiated charges are the best way to take into account the characteristics of air pollution (which depend on time, location, etc…). Some of them raise the issue of technology and innovation which help limit air pollution emissions. Other respondents claim more stringent legislative standards on emissions from vehicles.

Climate change costs

As regards climate change, respondents would prefer the application of ETS in all modes of transport or some of them (railways, maritime). Other participants favour the use of taxation which is seen as the best way to influence CO2 emissions. Most respondents highlight the global aspects of climate change costs and the need to have an action at EU level.
Other instruments?

Many of the participants highlighted the advantages of **electronic charging**. Electronic charging is seen as the best way to encapsulate all the external costs and make the user pay in an effective way. At the same time, other instruments such as norms, standards, research policy, information campaigns, intelligent transport system (ITS) were mentioned.

**Chart 8**

In addition, some respondents highlighted the need to take into account the specific case of regions such as the Alps. Other tools such as transit permits could be effective to tackle nuisances.
6. THE NEED FOR EUROPEAN ACTION

In general, the need for European action is acknowledged and the vast majority of participants expect the EU to act in this field. At the same time, participants mentioned that most of these costs are local and this should be reflected in the way economic instruments are applied.

Graph 9

7. SHOULD TRANSPORT REVENUES GO TO TRANSPORT?

The questionnaire asked to which purpose the revenues of internalisation should go. Most respondents think that revenues should go to transport, more specifically to the mode that is taxed or charged. Many respondents stressed the need to avoid cross-subsidisation between modes of transport; some of them, however, stressed the need for investing in intermodal transport. Revenues should be used to improve infrastructures if needed and above all to invest in cleaner technologies and develop environmentally friendly transport. The development of public transport and the promotion of cycling and walking are also considered a good way to improve the sustainability of transport. Revenues could be used to this end.

The majority of participants consider that revenues should be used to reduce negative externalities.

Chart 10
4.1. In your opinion, revenues from external costs should go to...

- 40% to Transport in general
- 33% to The mode of transport that has been charged or taxed
- 22% to The general public budget
- 5% to No opinion

* 427 respondents

Chart 11

4.2-4.3 How should revenues of external costs be used?

- Use revenues to compensate victims
- Use revenues to reduce external effects
- No opinion
- Disagree strongly
- Disagree
- Agree
- Strongly agree

* 469 respondents

Chart 12

8. **FINANCING INFRASTRUCTURES**

The majority of respondents think that infrastructure should be financed – mostly if not entirely – by the general budget. The comments allowed giving more details on the way infrastructures could be financed. Many participants highlighted that both – users and general budget – should contribute to financing the building of infrastructures. In addition, most of them suggested promote public-private partnership (PPP) as a viable way of financing.

Chart 12
9. SUMMARY OF POSITION PAPERS

In response to the Public Consultation on the Internalisation of external costs launched by DG TREN in December 2007, 17 position papers were sent to the Commission.

Internalisation of external costs

The majority of stakeholders agree on internalisation at differentiated prices, mentioning road and air transport as priorities and based on the following assumptions: it should aim at modal shift towards more sustainable modes of transport; it should lead to a fairer competition among transport operators and modes; it should be a chance for a "double dividend".

In some cases a step by step approach dealing with individual externalities is preferred as well as a double-tier approach taking into account also externalities induced by insufficiently maintained infrastructure; in others a full recovery of externalities is envisaged. In no case internalisation should evolve into additional taxation or introduce forced changes in the modal split.

Differentiation is often mentioned, stating the need of taking into account: existing charges and/or taxes already internalising some externalities; variations in domestic policy and variations of external costs both regionally and among modes and flows (transit and local).

It is also stressed that external costs and decisions on transport policy should be reflected in pricing mechanisms and in the appraisal processes used to support the policy decision-making process; furthermore charging should be fair and understandable to achieve a higher acceptance.

Only two position papers disagree on the merits of internalisation, showing scepticism on the possibility of internalising external costs for all modes of transport, of having a common model for assessing external costs and of reducing externalities through pricing. It is also stated that internalisation risks penalising home/work commuting lower income categories, reducing employment and leading to environmental degradation.

Expectations
Expected advantages include an increased sustainability in transport through modal shifts; fairer competition between different modes, removing current taxation inequalities; availability of revenues to invest on modes generating less externalities and to reduce existing taxes; rearrangement of production and retail systems in favour of proximity locations to cut down transport distances; improvement of environment, quality of life, road safety, employment, public transport; technological innovation leading to fleet renewal and promotion of less polluting vehicles.

In such a scenario, a uniform system integrating and charging the external costs of all transport modes in accordance to co-modality and as part of general mobility policy is envisaged by some respondents.

On the other hand, it is widely feared that charges will result into increased costs and prices - especially when no alternative modes are available - and into risks for European competitiveness.

It is also underlined that internalisation involves pricing external costs but not reducing externalities. However, the aim of the exercise should also be considered from the environmental point of view, rather than the economic aspects alone.

**Policy options**

It is generally agreed that tackling externalities requires a combination of technological, regulatory and pricing measures, including investments in environmentally friendly modes of transport, enhanced network capacity, land use policies, availability of co-modality and promotion of public transport, trading schemes as well as taxation, incentives and subsidies. Such combination should take into account the complementarity of the different modes, the specificity of each one and the global frame of mobility policies.

Measures suggested to tackle each externality vary though.

**Congestion** is mostly seen as a local problem - especially related to road transport - which therefore requires local solutions. Anti-congestion measures mentioned include pricing such as differentiated charging and non-pricing tools such as improvement of the infrastructure in terms of capacity and connections, smart Intelligent Transport Systems, parking and traffic control policies, provision of public transport alternatives to allow modal shifts, as well as the rearrangement of logistics in terms of locations and short-distance trips.

Internalisation is not considered a proper instrument to reduce **accident** costs as they are already internalised by insurances, whose liabilities are envisaged to be expanded in order to cover them totally. Road safety charges are also suggested, being composed by a fixed part (annual insurance) and a variable part according to distance (charge).

On **noise** reduction, positions are divided between those who suggest to tackle this externality with differentiated charging and those who rather support regulatory measures such as land use or new technologies for engines and screens (e.g. use of low-noise rolling material in urban areas). Mountainous areas are particularly aggravated by this externality, therefore noise charges are suggested by some to reflect this peculiarity.
In order to tackle air pollution some are in favour of differentiated charging (according to location, day or week time, Euro class), whilst others rather support regulations and fleet renewals, stressing that air pollution strongly depends on local meteorological conditions and emissions, as well as being to some extent a global issue.

Climate change is considered a global and interdisciplinary issue to be connected with air emission schemes and global warming. Taxation and permits are mostly suggested, in addition to technical and legislative measures; in particular the following tools are envisaged for air transport: an homogeneous air traffic control system (Single European Sky) and fleet renewal.

As far as integrated charging is concerned, the use of electronic tools allowing differentiation as well as the uniformity of methods (or the interoperability of systems) is often proposed by respondents.

**Role of European revenues**

Although there is a general consensus on harmonisation at European level, positions vary from disagreement on the need for a generalised or statutory EU model for internalising external costs (due to national, regional and local differences) to wishing strict regulation for all transport modes in terms of level and composition of the charges at EU level. On the one hand it is suggested that European Union should limit its role to non-binding guidance and legal proposals in accordance with the principle of subsidiarity, on the other it is believed that it should intervene in the internalisation of external costs in order to create a level-playing field between the different modes and to foster modal shift.

**Revenues**

It is generally agreed that revenues from charges should be earmarked to the transport mode that has generated them and used to decrease external costs through infrastructure construction or upgrading as well as through technological innovation. Although cross-subsiding is much less accepted, it is also mentioned that revenues should go to those modes of transport generating less externalities.

Differentiation in revenues is also suggested, locally distinguishing revenues generated by transit traffic from those generated by exchange or local traffic. In one case, it was stressed that a distinction should be made for revenues generated by urban congestion charging – which should be used for all modes of transport of the city - and those generated by non urban congestion charging, which on the contrary should be used to infrastructure adaptation in the mode of transport that has been charged.

When the victims of the externalities cannot be clearly identified, revenues are suggested to go to public budget and be used to reduce burden on society.

**Other comments**

The aim of internalisation is stressed not to be the payment of charges but the reduction of externalities, therefore paying for externalities should be used as an instrument to achieve this goal.
Other significant issues identified by respondents as needing debate concern the extent to which the external cost charging approach is applied in other important branches of the economy and the extent to which it may be possible to apply the “polluter pays” principle as distinct from the “user pays” principle.

It is underlined by many that in rail the primary source of energy and its impact in terms of CO2 emissions should be considered; in this perspective it is remarked that European railway sector is working hard on the electrification of the remaining diesel lines in order to reduce air pollution.

The need for extending port capacity and improving access roads and intermodal connections has also been stressed in strong terms.
ANNEX 1: QUESTIONNAIRE

GENERAL INFORMATION

Your Profile
Citizen
Organisation

(for Citizens)

Gender
Male
Female

Age
<24
25-34
35-44
45-54
55-64
>65

Current occupation
Employee
Manual worker
Self-employed
Without a professional activity
Other

Would you say you live in a ...?
Metropolitan zone
Other town/urban centre
Rural zone
Other

What is the mode of transport you use most for your daily mobility?
Car
Public transport
Powered two wheelers
Bicycle
Walking
Other
### What is the mode of transport you use most when travelling over 500 kilometres?
- Car
- Train
- Plane
- Ship
- Coach
- Other

*(for Organisations)*

<table>
<thead>
<tr>
<th><strong>Organisation name</strong></th>
<th><strong>Organisation type</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Associations/non-governmental organisations</td>
</tr>
<tr>
<td></td>
<td>Chamber of Commerce</td>
</tr>
<tr>
<td></td>
<td>Consultancy/Lobbying</td>
</tr>
<tr>
<td></td>
<td>Educational establishment</td>
</tr>
<tr>
<td></td>
<td>Employers' organisation</td>
</tr>
<tr>
<td></td>
<td>European institution or body</td>
</tr>
<tr>
<td></td>
<td>Government, Ministry</td>
</tr>
<tr>
<td></td>
<td>Industry, business</td>
</tr>
<tr>
<td></td>
<td>International organisation</td>
</tr>
<tr>
<td></td>
<td>Library</td>
</tr>
<tr>
<td></td>
<td>Local government</td>
</tr>
<tr>
<td></td>
<td>National government</td>
</tr>
<tr>
<td></td>
<td>Not-for-profit association</td>
</tr>
<tr>
<td></td>
<td>Parliament</td>
</tr>
<tr>
<td></td>
<td>Press</td>
</tr>
<tr>
<td></td>
<td>Private company</td>
</tr>
<tr>
<td></td>
<td>Public sector body</td>
</tr>
<tr>
<td></td>
<td>Publishing</td>
</tr>
<tr>
<td></td>
<td>Regional government</td>
</tr>
<tr>
<td></td>
<td>Scientific/research institute</td>
</tr>
<tr>
<td></td>
<td>Trade union</td>
</tr>
<tr>
<td></td>
<td>University</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

**Main field of activity**
<table>
<thead>
<tr>
<th>Freight transport services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuels</td>
</tr>
<tr>
<td>Infrastructure</td>
</tr>
<tr>
<td>Policy and legislation</td>
</tr>
<tr>
<td>Public transport services</td>
</tr>
<tr>
<td>Taxi services</td>
</tr>
<tr>
<td>Transport equipment</td>
</tr>
<tr>
<td>Users associations</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

**Which mode of transport do you represent?**

- Air transport
- Inland waterways transport
- Maritime transport
- Rail transport
- Road transport
- Urban transport
- Other

**Region**

- European Union (list of countries)
- Europe outside EU (list of countries)
- Other

1. **EXTERNAL COSTS**

*External cost is a cost that is not included in the market price, e.g. a cost that is not incurred by those who generate it. This means that when engaging in a transport activity, a person will incur private costs linked to the use of a mode of transport (tolls or fuel use), but will not be taking into account nuisances imposed on others such as congestion, accidents, noise, pollution and emissions of CO2.*

1.1. **In your opinion, do you think that road transport imposes nuisances on other transport users and society?**

- Yes
- No
- No opinion

**IF YES**

Could you please rank the five following nuisances generated by road transport in order of magnitude (1=smallest nuisance, 5=greatest nuisance)
### Comments (if any) on road external costs

1.2. In your opinion, do you think that rail transport imposes nuisances on other transport users and society?

- Yes
- No
- No opinion

**IF YES**

Could you please rank the five following nuisances generated by rail transport in order of magnitude (1=smallest nuisance, 5=greatest nuisance)

- Congestion, Accident, Noise, Air pollution, Climate Change.

### Comments (if any) on rail external costs

1.3. In your opinion, do you think that air transport imposes nuisances on other transport users and society?

- Yes
- No
- No opinion

**IF YES**

Could you please rank the five following nuisances generated by air transport in order of magnitude (1=smallest nuisance, 5=greatest nuisance)

- Congestion, Accident, Noise, Air pollution, Climate Change.

### Comments (if any) on air transport external costs

1.4. In your opinion, do you think that maritime transport imposes nuisances on other transport users and society?

- Yes
- No
- No opinion

**IF YES**
Could you please rank the five following nuisances generated by maritime transport in order of magnitude (1=smallest nuisance, 5=greatest nuisance)
Congestion, Accident, Noise, Air pollution, Climate Change.

Comments (if any) on maritime external costs

1.5. In your opinion, do you think that inland waterways transport imposes nuisances on other transport users and society?
Yes
No
No opinion

IF YES

Could you please rank the five following nuisances generated by inland waterway transport in order of magnitude (1=smallest nuisance, 5=greatest nuisance)
Congestion, Accident, Noise, Air pollution, Climate Change.

Comments (if any) on inland waterway external costs

2. INTERNALISATION OF COSTS

Internalisation is a way to attribute external costs (such as pollution, congestion, noise, ...) to users and to ensure that prices paid by transport users reflect social costs, i.e. private and external costs.

The cost of transport can be split into private/internal costs (those directly borne by the person engaged in transport activity) and external costs (i.e. those that are imposed on others but not supported by the user). The sum of private and external costs represents social costs.

2.1. Do you agree that it is important to internalise the external costs produced by transport?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

ADVANTAGES/DISADVANTAGES EXPECTATION

Assuming that full internalisation if possible in all modes of transport, some patterns of transport may become more expensive, the effects may not be the same on all modes of transport, thus making some forms of transport more or less attractive than others. What are the main advantages/disadvantages you expect on the following:

2.2. What are the main advantages/disadvantages you expect on the economy?
2.3. What are the main advantages/disadvantages you expect on the social situation?

2.4. What are the main advantages/disadvantages you expect on the environment?

2.5. In your opinion, how could the negative effects of congestion, accidents and environmental nuisances be reduced?

3. POLICY OPTIONS

Policy options will envisage the use of different market based instruments for each external cost – tax, charge and trading scheme. A tax is a required payment of money to governments that are used to provide public goods and services for the benefit of the community as a whole. Examples are fuel tax, circulation tax, registration tax. A charge is a proportional payment required in exchange for a clearly defined service. For example, a toll charge will give access to the use of a specific infrastructure (bridge, motorway, etc...). A tradable permit scheme is a mechanism by which the authorities set a maximum level of pollution or use of an infrastructure and assign to individuals/operators a quantity of permits that corresponds to this level. The individuals/operators can then trade permits, improving the efficiency in the distribution of efforts or in the use of the infrastructure.

3.1. Congestion Costs

3.1.1. In general, which instrument would you favour to tackle congestion costs?

<table>
<thead>
<tr>
<th>Charge</th>
<th>Tax</th>
<th>Tradable permit</th>
<th>Other</th>
</tr>
</thead>
</table>

3.1.2. In road transport which action you would favour to tackle congestion costs?

| No new action | Congestion Charges for freight | Congestion Charges for passenger (including cars) | Congestion Charges for freight + passenger (including cars) | Tradable permit | No opinion |

3.1.3. In rail transport which action you would favour to tackle congestion costs?

| No new action | Scarcity charge | No opinion |

3.1.4. In air transport which action you would favour to tackle congestion costs?

| No new action | Scarcity charge | No opinion |

3.1.5. In maritime transport which action you would favour to tackle congestion costs?

| No new action | Congestion charge | No opinion |
3.1.6. In inland waterway transport which action you would favour to tackle congestion costs?

| No new action | Congestion charge | No opinion |

3.1.7. Do you think the EU should do something in the field of internalisation of congestion costs?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

Comments (if any) on congestion cost

3.2. Accident Costs

Accidents are mainly a road problem (in 2005, there were 105 killed in rail accidents) even though the number of road fatalities has considerably decreased since 1990. In general, insurance companies do not cover total costs of accidents but only partial ones. The remaining part is not borne by transport users.

3.2.1. Do you agree that accidents costs should be internalised only for road transport?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

3.2.2. Should accident costs also be internalised in rail transport?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

3.2.3. Should accident costs also be internalised in aviation?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

3.2.4. Should accident costs also be internalised in maritime transport?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

3.2.5. Should accident costs also be internalised in inland waterway transport?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

3.2.6. Which action you would favour for accidents in road transport?

| No new action | Safety charge | Liability insurance | No opinion |

3.2.7. Do you think the EU should do something in the field of internalisation of
accident costs in road transport?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Disagree strongly</th>
<th>No opinion</th>
</tr>
</thead>
</table>

Comments (if any) on accident cost

3.3. Noise Costs

3.3.1. In general, which instrument would you favour to tackle noise costs?

<table>
<thead>
<tr>
<th>Differentiated charge</th>
<th>Tax</th>
<th>Other</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.3.2. Which action you would favour to tackle noise costs in road transport?

<table>
<thead>
<tr>
<th>No new action</th>
<th>Differentiated charge</th>
<th>Tax</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.3.3. Which action you would favour to tackle noise costs in rail transport?

<table>
<thead>
<tr>
<th>No new action</th>
<th>Differentiated charge</th>
<th>Tax</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.3.4. Which action you would favour to tackle noise costs in air transport?

<table>
<thead>
<tr>
<th>No new action</th>
<th>Differentiated charge</th>
<th>Tax</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.3.5. Do you think the EU should do something in the field of internalisation of noise costs?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Disagree strongly</th>
<th>No opinion</th>
</tr>
</thead>
</table>

Comments (if any) on noise cost

3.4. Air pollution costs

3.4.1. In general, which instrument would you favour to tackle air pollution costs?

<table>
<thead>
<tr>
<th>Differentiated charge</th>
<th>Tax</th>
<th>Other</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.4.2. In road transport, which action you would favour to tackle air pollution costs?

<table>
<thead>
<tr>
<th>No new action</th>
<th>Differentiated charge</th>
<th>Tax</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.4.3. In rail transport, which action you would favour to tackle air pollution costs?
3.4.4. In air transport, which action you would favour to tackle air pollution costs?

| No new action | Differentiate charge | Tax | No opinion |

3.4.5. In maritime transport, which action you would favour to tackle air pollution costs?

| No new action | Differentiate charge | Tax | No opinion |

3.4.6. In inland waterway transport, which action you would favour to tackle air pollution costs?

| No new action | Differentiate charge | Tax | No opinion |

3.4.7. Do you think the EU should do something in the field of internalisation of air pollution costs?

| Strongly agree | Agree | Disagree | Disagree strongly | No opinion |

Comments (if any) on air pollution cost

3.5. Climate Change Costs

3.5.1. In general, which instrument would you favour to tackle climate change costs?

| Emission trading scheme | Tax | Other | No opinion |

3.5.2. In road transport, which action you would favour to tackle climate change costs?

| No new action | Emission trading scheme | Tax | No opinion |

3.5.3. In rail transport, which action you would favour to tackle climate change costs?

| No new action | Emission trading scheme | Tax | No opinion |

3.5.4. In air transport, which action you would favour to tackle climate change costs?
3.5.5. In maritime transport, which action you would favour to tackle climate change costs?

<table>
<thead>
<tr>
<th>No new action</th>
<th>Emission trading scheme</th>
<th>Tax</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.5.6. In inland waterway transport, which action you would favour to tackle climate change costs?

<table>
<thead>
<tr>
<th>No new action</th>
<th>Emission trading scheme</th>
<th>Tax</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.5.7. Do you think the EU should do something in the field of internalisation of climate change costs?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Disagree strongly</th>
<th>No opinion</th>
</tr>
</thead>
</table>

Comments (if any) on climate change cost

3.6. Integrated charging

3.6.1. Would you favour electronic charging in road transport?

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Disagree strongly</th>
<th>No opinion</th>
</tr>
</thead>
</table>

3.6.2. Are there other policy options you would suggest?

3.6.3. Are there other pricing instruments you would suggest for congestion, noise, accidents, air pollution or climate change?

3.6.4. Are there other non-pricing instruments you would suggest for congestion, noise, accidents, air pollution or climate change?

Comments (if any) on integrated charging
4. USE OF REVENUES

4.1. In your opinion, revenues from external costs should go to…

- The mode of transport that have been charged or taxed
- Transport in general
- The general public budget
- No opinion

4.2. In your opinion, revenues should be used to compensate the victims of the negative effects

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Disagree strongly</th>
<th>No opinion</th>
</tr>
</thead>
</table>

4.3. In your opinion, revenues should be used to reduce external costs

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Disagree strongly</th>
<th>No opinion</th>
</tr>
</thead>
</table>

Comments (if any) on the use of revenues

5. INFRASTRUCTURE

5.1. The construction of infrastructure should be paid by…

- The general public budget (i.e. paid by the taxpayer)
- The user
- No opinion

Comments (if any) on infrastructure

6. GENERAL COMMENTS

Are there other comments that you would like to make on the "internalisation of external costs" topic not covered by the above questions?