



Doing more with less  
Towards the most transport-efficient  
economy

Position Paper – December 2005

**Submission to the public consultation of the European Commission on the  
Mid-term Review of the White Paper on the European Transport Policy**

**Submitted by:**

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## Summary – ten key actions needed

1. The EU should strive to become the most transport-efficient economy in the world, through pursuing *double decoupling*: decoupling of traffic growth from GDP, and decoupling of environmental impacts from traffic. *Doing more with less* should not just be the EU's slogan for energy policy, but also for transport policy;
2. By 2010 a transport and infrastructure pricing system should be in place which reflects the real costs to society and gives sufficient incentives to start reversing current trends;
3. Direct and indirect subsidies to transport, in particular road and air transport, should be halted as soon as possible. Curbing national fiscal rules that stimulate car use and ending VAT exemptions of international transport are two priority areas;
4. Ex ante evaluation of transport infrastructure projects funded with EU money should be drastically improved. First, the transparency, scrutiny and public participation in cost-benefit and environmental impact assessments has to be increased. Second, despite the existence of a directive for Strategic Environmental Assessment, project planning lacks serious consideration of different strategic alternatives – such as other modes, or demand management - to solve the transport problem at stake.
5. Construction on new infrastructure that harms ecosystems or is unviable from a socio-economic point of view should be halted;
6. The EU should pursue its policies to revitalise rail transport, but the focus of investment should be shifted from constructing new megaprojects to improving the use, efficiency and interoperability of the existing network;
7. By 2020 energy use and greenhouse gas emissions from the transport sector should have stabilised, to start falling afterwards, and transport should not give rise any more to significant concerns in the field of air quality, acidification and eutrophication;
8. Stronger policies to cut traffic pollution at source are needed as this is an area where the EU can make a big difference. Priority targets are the doubling of fuel efficiency of cars and vans over the next decade, near-zero NO<sub>x</sub> and PM<sub>10</sub> emissions from diesel vehicles, reducing emissions from aircraft and shipping, emissions under real-world driving, and noise emissions from road vehicles, aircraft and trains;
9. Incentives for biofuels should be linked to a system of sustainability certification, like the Forest Stewardship Council (FSC) label for wood products;
10. The EU should actively support initiatives for sustainable urban transport, in particular by co-financing the costs of implementation of urban and regional road pricing systems, and by developing human and institutional capacity for sustainable urban transport planning, especially in the new Member States.

## Introduction

The European Commission is currently undertaking a mid-term review of the 2001 Common Transport Policy. The Common Transport Policy is not a standalone document. It is firmly rooted the key objective of the European Union to ensure free movement of goods (and persons, services and capital).

In the first years of the 21<sup>st</sup> century European leaders modernised the concept of the Common Transport Policy by integrating the policy in Europe's Sustainable Development Strategy.

A sustainable transport system minimises consumption of non-renewable resources emissions, land use, impacts on ecosystems and human health, and limits waste, emissions en renewable resources within the absorption capacity of the planet. It is socially inclusive, by providing access for all citizens to the most essential goods and services, offering choice of transport mode, and protecting vulnerable user and other groups from safety risks, health risks and nuisances caused by transport. In a sustainable transport system, users instead of taxpayers pay for their infrastructure use and environmental, safety and congestion impacts they impose on others, so that they get incentives for smarter travel choices.

The 2001 Gothenburg European Council stated *that 'sustainable policy should tackle ... the full internalisation of social and environmental costs. Action is needed to bring about a significant decoupling of transport growth and GDP growth, in particular by a shift from road to rail, water and public passenger transport.'*

Furthermore, the 2002 Barcelona European Council confirmed that the Commission should *'accelerate its work in the preparation of a framework directive on infrastructure charging, to ensure that by 2004 different modes of transport can better reflect their costs to society'*.

The mid-term review of the EU's Common Transport Policy offers an excellent opportunity to renew the drive towards sustainable development in the transport sector.

The need to make transport more environmentally sustainable is more pressing than ever. Therefore the key theme of this submission is *'Doing more with less – towards a transport efficient economy'*.

A transport efficient economy is an economy that uses transport as sparsely as possible to achieve its objective – i.e. an economy in which the benefits of every transport movement clearly outweigh its private and social costs. This may seem a simple objective to achieve, but everyday practice is still far away from achieving it.

We will argue for a **double decoupling**: a decoupling of transport growth from economic growth, and obviously also a decoupling of environmental impacts from transport growth.

In this submission, T&E will address four key themes:

- The environmental impact of transport, many of which are rising at worrying rate;
- An investigation into the decoupling objective, which shows that this objective is feasible and good for Europe;

- The internalisation of external costs and the abolition of subsidies in the transport sector;
- A drive to make the EU's investment policy more transparent and more sustainable;

## **Chapter 1: Environmental impact of transport increasing**

Since the early 90s the EU has issued a series of Directives and other policies that aim to improve the environmental performance of transport. The actions range from source policies (vehicle standards and agreements, fuel quality standards) to more integrated transport policies such as transport pricing, policies to improve the competitive position of rail and waterway transport, and policies to improve the environmental assessment of transport infrastructure projects.

In some areas the policies have certainly been successful. Lead has been eliminated from petrol and hence from the air, and the concentration and deposition of SO<sub>2</sub> and hydrocarbons is clearly decreasing.

But still, many environmental impacts keep increasing rather than decreasing, and for many others targets are out of reach. A shortlist follows below.

### **Climate change and energy use**

- Weather-related damage in Europe amounted to approximately \$100 billion over the 1999-2003 period, representing a doubling compared with earlier periods;
- Transport is the biggest contributor to climate change and air pollution;
- Transport accounts for about one third of human-induced global warming in the EU. Energy consumption and CO<sub>2</sub> emissions from transport in the EU30 (EU-27 plus Turkey, Norway and Iceland) increased by 27 per cent between 1990 and 2003, or some 2 per cent per year on average. Road emissions increased by 24 per cent, shipping by 32 per cent and aviation by 70 per cent (EEA/Eurocontrol);
- The voluntary commitment of the car industry to reduce energy use and CO<sub>2</sub> emissions from new cars is off track. In the last 4 years (2005-2008) emissions will have to be reduced by 14%, compared with 13% over the first nine years (1995-2004). The figures do not even take into account the CO<sub>2</sub> effect of increased use of air conditioning;
- By 2020 the EU will import 86% of its oil, three-quarters of which will be used for transport. At €50 per barrel oil prices, the import bill for transport oil will be over €140 bn (CEC, Energy and transport trend until 2030).

### **Air pollution and noise**

- Some 370,000 people die prematurely every year in the EU25 due to air pollution. Fine particles are the most important contributor (Clean Air for Europe Baseline scenario);
- NO<sub>2</sub> and PM<sub>10</sub> concentrations at road traffic stations appear to be stable over the 1999-2002 period - the expected decrease in emissions does not appear to have a statistically significant influence on the air quality (EEA);
- Peak ozone concentrations at urban background stations have not changed over the last decade, despite efforts to reduce emissions (EEA);
- Noise from individual vehicles has not been significantly reduced over the last 30 years – which implies the overall noise burden has grown in pace with transport growth;

### **Pricing, investment, decoupling and modal shift**

- Although some countries are trying to make transport pay its true costs, the average level of lorry charges in the EU is decreasing;
- Decoupling of transport growth from GDP and modal shift have not taken place;

- The fragmentation of ecosystems by transport infrastructure is still increasing, despite the existence of habitat and bird directives and tools such as Strategic Environmental Assessment;
- Information about the economic, environmental and social impacts of projects sponsored with EU money, including the TEN-T priority projects, is still almost completely absent, which seriously hampers informed debate and damages the image of the EU.

It is clear that, in order to make transport truly sustainable, much stronger policies are needed than those currently in place.

## Double decoupling: towards the most transport efficient economy

### Background

As said earlier, EU leaders said in the 2001 Gothenburg European Council that ‘*Action is needed to bring about a significant decoupling of transport growth and GDP growth, in particular by a shift from road to rail, water and public passenger transport.*’

Over the last year, the pros and cons of this objective have been intensively discussed, also in the framework of the Lisbon Strategy. Eurostat data for the EU25 show that decoupling has not taken place. Many argue on the basis of these statistics that the link between economic growth and transport growth is inextricable, and that attempts to slow down transport growth would compromise the Lisbon objectives.

### Decoupling: why the EU should become the most transport efficient economy

In spite of these discussions, there is a wealth of scientific and empirical evidence that decoupling is feasible and does not just help the environment, but also the European economy.

First, it may be good to remind readers of one of the conclusions of the authoritative report of the UK’s Standing Advisory Committee on Trunk Road Assessment (SACTRA):

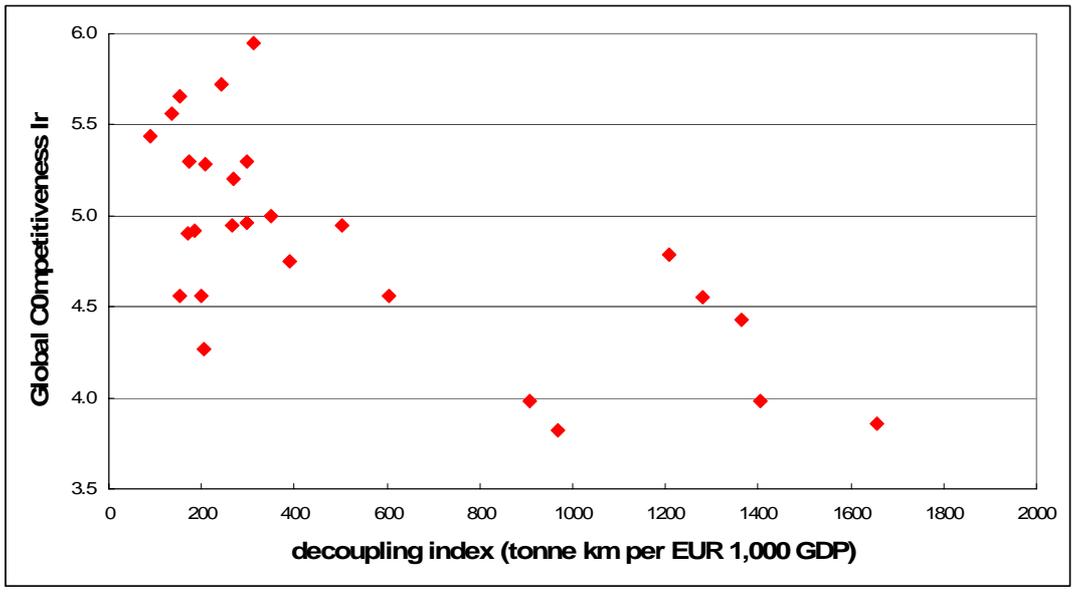
*“There is scope for carefully judged policies which help to decouple the rate of traffic growth from the rate of economic growth, thereby reducing the environmental and congestion costs of traffic and also – to some extent – assisting in **delivering the benefits of economic growth**. Such policies include pricing, management and investment initiatives.”* (SACTRA, the UK Standing Advisory Committee on Trunk Road Assessment, Transport and the Economy, 1999).

In addition, the well-monitored example of London confirms the findings of numerous theoretical studies that transport policy *can* seriously tackle transport volume. The London congestion charge has curbed use of private cars by 35% and ‘has had a broadly neutral impact on the economy of central London’ (April 2005 monitoring report).

Thirdly, closer analysis of different countries and regions within the EU reveals a wide variation of transport intensities per unit of GDP and shows that the assumption that decoupling threatens competitiveness is doubtful at best.

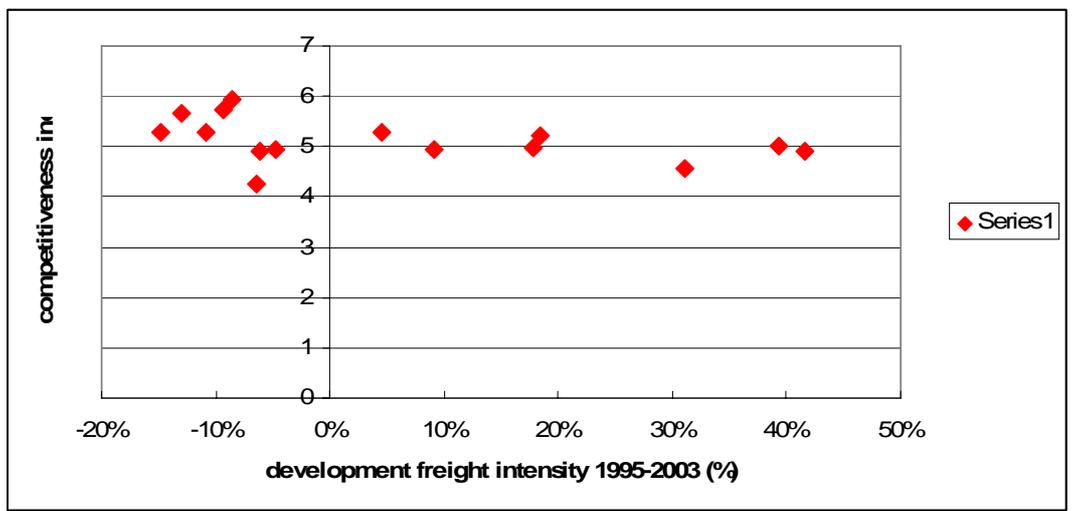
See the graph below in which freight transport intensity of different countries has been put against the country’s score on the Global Competitiveness Index. Every dot in the graph represents a country.

Graph: decoupling of freight transport vs competitiveness of countries for 27 European states



Another graph shows a more dynamic picture. It shows the development of the freight transport intensity

Graph: development of freight transport intensity in 15 old EU Member States 1995-2003 (in tonkm/ €1,000 GDP) against their ranking on the Global Competitiveness Index



This graph shows that the top-5 of competitive countries (Finland, Sweden, Denmark, UK and the Netherlands) all managed to decouple their freight transport volume from economic growth, by 9 to 15 per cent. Most of the countries that did not decouple had a GCI score under 5.

These graphs clearly show that

- as a general trend, competitive countries need less transport to earn their GDP than uncompetitive countries
- the most competitive countries have managed to decouple freight transport from economic growth, while many of the less competitive ones have not

At the very least the graphs cast doubt on the notion that breaking the link between transport growth and economic growth would wreck the economy and competitiveness, and therefore be in conflict with the Lisbon agenda.

There is an analogy with energy efficiency here - transport use and energy use are alike in many ways. Both are indispensable to any modern economy and both are means to an end, rather than an end in themselves. Both are not external effects in themselves but rather an important cause of external effects. But crucially both are, in the end, costs to society and should be used as sparsely as possible.

At the beginning of the 1970s there was a generally-held consensus that economic growth and growth of energy consumption inevitably go hand in hand. The Club of Rome used this argument to forecast *ecological* disaster, while right-wing hardliners used it to 'prove' that attempts to break the link (i.e. to save energy) would lead to *economic* disaster. Although energy consumption is still on the rise, it is now, thankfully, clearly nonsense to view energy saving as a bad thing.

Thirty years on, transport policy makers have some catching up to do. As we have seen, there is abundant scientific and empirical evidence that reducing transport can have numerous positive consequences (better traffic flow, improved safety, reduced environmental and health impacts) – especially when transport prices are too low, as they generally are.

Therefore, the decoupling objective should not be ditched. It could be reformulated: Europe's approach to transport policy should be based on the guiding principle that *the EU should become the most transport-efficient economy in the world.*

#### **A 'double decoupling'**

We also want to stress that decoupling of transport and GDP alone will not be enough to arrive at a sustainable transport system. As we have seen, there remains a strong need to also break the link between transport growth and environmental impacts. We need both kinds of decoupling.

## Getting the prices right

Proper transport pricing is one of the key tools to increase the sustainability of the transport system. Although it is not the ultimate silver bullet, without a proper pricing framework the economic signals will keep pushing in the wrong direction. All available research shows that transport is still far away from covering its external and infrastructure costs. For example, the recent comprehensive study *The price of transport* (CE Delft, 2004) shows that about 80 per cent of infrastructure and external costs of Dutch lorries is not covered by charges. Although the Dutch have one of the highest EU taxes on cars, even they do not cover their identifiable costs.

Despite the recent compromise on the Eurovignette Directive, the legal framework on transport pricing is still very incomplete at European level, not least by lack of action from the Commission. The Commission never presented its promised comprehensive framework for transport infrastructure pricing. The Communication on airport and seaport charges has up to now not been delivered. The Eurovignette proposal excluded environmental costs. This has the unfortunate effect of providing the perfect excuse for every individual mode to point at the – perceived or real – unfair way it is treated vis-à-vis its competitors.

The European Commission should therefore propose as soon as possible fulfil the promise made in the 2001 White Paper to present a **comprehensive framework** on infrastructure charging for all transport modes. Such a framework should reduce existing distortions between different modes of transport and give clear incentives to better use of existing infrastructure capacity and improved environmental and safety performance.

The request of Council and Parliament to present within 2 years a framework to internalise external costs of lorries is an ideal stepping stone to present such a comprehensive framework. In addition, there is a need to

- tackle the full climatic impact and the numerous fiscal advantages of the **aviation** sector, by inclusion of the sector in the EU ETS, ancillary en route and airport charges, and ending of the exemptions from VAT and fuel taxes;
- Pursue a similar strategy for **maritime** transport;
- Identify and tackle the numerous fiscal and other regulatory **subsidies** that boost the use of cars, such as excessive compensation of car commuting costs, private use of company cars at zero marginal costs, and the like. Such distortions are increasingly out of touch with modern reality and in conflict with objectives in the field of road safety, climate change, energy security, air quality and efficient functioning of the market.
- amend Directive 2003/96 on energy taxation to increase the minimum **road diesel and petrol taxes** and petrol to at least €500 per 1,000 litres by 2010. Ensure a level playing field by introducing minimum taxes for **rail diesel** and VAT on fuel oils used by inland ships, and by modernising the 1952 Strasbourg Fuel Oils Agreement between the Rhine States so that a minimum tax for **inland shipping diesel** can also be levied. In addition, it should be ensured that the minimum levels are corrected for **inflation**.

## Modernising the EU's transport investment policy

Investing in transport systems is, besides pricing, another crucial tool the EU has to increase the sustainability and efficiency of the transport system.

This chapter focuses on the modernisation of the EU's policy on investment in transport. We start with a general introduction (some quotes from scientific reports), then we review current practice, and we conclude with a couple of recommendations for future improvement.

### Investment in infrastructure: impacts on growth often overrated

While proponents of investment in infrastructure often claim that such investments are long overdue, and are essential to secure economic growth, the scientific consensus about this topic is a whole lot more balanced. We highlight four quotes from respected sources.

"When opportunity costs of infrastructure investments are taken into account, it is likely that ... putting more resources into education and training is likely to offer better returns." (Transportation Research Board, 1997, '*Macroeconomic Analysis of the Linkages between Transportation Investments and Economic Performance*').

"All that can be said is that the impact of infrastructure investment on employment is limited or even negative, contrary to popular belief" (conclusion from ECMT's *Round Table on Transport and Economic Development*, 2001, p190)

"There are no clear and incontestable conclusions regarding the effects on infrastructure investment on the local industrial or commercial fabric." (ECMT's *Round Table on Transport and Economic Development*, 2001, p190, emphasis added).

"The substantial regional, national and international development effects commonly claimed by project promoters typically do not materialise, or they are so diffuse that researchers cannot detect them." (Flyvberg et al, *Megaprojects and risks*, 2003, p136)

These conclusions show that, at the very least, economic growth claims from transport investment have to be much more solidly underpinned than is generally the case.

### Current practice: in need of modernisation

Europe's current policies in the field of transport investment are not in line with best practice in EU Member States, from the very first planning stages to the last implementation stages.

1. The planning process. A first point of criticism is the process with which transport investment priorities are established. In our view this process mocks with modern investment planning. In the case of the TEN-T priority projects, essentially a High Level Group after a lot of bickering drew a set of lines on a map, establishing a political 'fait accompli' in which over €200b of tax money from EU citizens was involved. Such a process is thoroughly undemocratic. The identified priority projects were not in any sense backed up with solid data about their expected value for money or other socio-economically relevant indicators. Much to our aston-

- ishment the Commission recently again launched a new High Level Group to 'study' the infrastructure needs in the framework of the neighbourhood policy.
2. The use of spending as a measure of success. Strongly related to point 1, the Commission uses the level of spending on infrastructure projects, on particular on the TEN-T projects, as a measure for success. In most policy areas the reverse is true: one wants to achieve as many results as possible with as little spending as possible. It is time that transport investment policy catches up with this sensible approach;
  3. Balance in investment. By far the largest majority of spending goes into 'hardware' (concrete or iron). Investment in improving the use, efficiency and interoperability of the existing network lags far behind – while there is ample evidence that such investment often offers a much better economic rate of return and certainly leads to less environmental damage.
  4. Lack of transparency in implementation. It is virtually impossible to find information on expected economic, social or environmental impacts of EU-sponsored projects. This lack of transparency seriously undermines the trust that EU citizens have in the spending of EU money.
  5. A more holistic appraisal of projects and possible alternatives. Despite the adoption of a Directive on Strategic Environmental Assessment, there is still little or no strategic thinking involved when it comes down to assessing different variant of projects. Usually 'variants' are just defined as different ways to build a specific piece of infrastructure, instead of a more holistic approach in which multi-modal solutions or smart demand management solutions are also seriously considered as solutions to a traffic problem.

### **Recommendations for improvement**

From these five flaws, we can define the following recommendations to modernise EU's transport investment policy:

1. Much improve the analytical basis for strategic investment plans. There is a tremendous amount of knowledge available in the EU on real transport bottlenecks and costs and benefits of potential solutions, but the current system of high level groups does not use that potential and is overly focused on national pet projects. This seriously undermines the credibility and value for money of EU spending on transport. Economically and ecologically unviable projects should already in this stage be eliminated;
2. Evaluate EU transport spending on the basis of its results, rather than on the basis of its size;
3. Rebalance the investment package from hardware to more software, thereby increasing use, efficiency and interoperability of the existing networks. The objective to improve the quality of rail services is fine, but there are economically and environmentally more attractive investments to be made than the hugely expensive megaprojects that take the bulk of current investment;
4. Drastically increase the quality and transparency of project information. Currently hardly any information on economic, environmental or social impacts of EU-sponsored projects is publicly available, hampering public debate and thereby reducing the quality of investment. In addition, the analyses are rarely or not at all scrutinised by respected and independent bodies;
5. Assess projects more holistically, by taking a much broader range of alternative solutions into account than is currently the case.

## Cleaning up individual modes of transport

Cleaning up vehicles and fuels is one of the most powerful tools the EU has to improve the environmental performance of the transport system. Indeed, the scarce environmental successes in the transport sector can largely be attributed to these policies.

Still, the EU is in danger of not meeting its Kyoto targets, is far from attaining its air quality and deposition standards, and noise from transport often exceeds WHO standards. Heads of State set in March 2005 an indicative 15-30% reduction of greenhouse gas emissions in 2020 relative to 1990 levels. It is in this context that the transport sector faces specific obligations.

### Biofuels

The Commission recently issued its Biomass Action Plan that strongly promotes the use of biomass and biofuels from three perspectives: agricultural employment, energy security and climate change.

While all these reasons are valid, we feel the Communication is overly enthusiastic and ignores the most important major drawback of biofuels: its land use and its therefore indirect impacts on biodiversity.

We are aware that a couple of studies point out that there is enough land available in Europe to grow a significant quantity of biomass. But an increasingly free market does not listen to potentials or availabilities – it generally looks for the lowest overall costs to produce biomass. It is well known that biomass is cheaper grown in the tropics than in Europe, that competition for new land is fierce, and that additional land demand to grow biomass is quite likely to cause direct or indirect pressure on important ecosystems. There are far too few systematic studies available on this topic.

The Communication does recognise the need for sustainability certification of biomass, although not as a first priority action. We would like to stress that it IS a first priority action. There are numerous initiatives and studies on this topic and it is time the Commission starts work on a 'best practice' authoritative sustainability label.

### CO<sub>2</sub> from light duty vehicles

The CARS21 High Level Group recommended an integrated approach to reduce CO<sub>2</sub> emissions from light duty vehicles. T&E obviously agrees that more measures are needed than just vehicle technology to reduce CO<sub>2</sub> emissions from transport, but strongly opposes the idea that more measures than just vehicle technology are needed to achieve the long-standing objective of 120 g CO<sub>2</sub> per km for new registered cars by 2010. The 120 g/km is clearly a target for vehicle technology, as expressed by the Council in 1996 'the strategy could be **supplemented** by other measures'. Any broader interpretation of the 120 g/km objective would therefore imply a watering down of CO<sub>2</sub> policy, which would be slightly ironic given the recent long-term climate commitment by Heads of State and the rapidly increasing urgency of the issues of climate change, energy costs and energy security.

### Euro standards

At the time of writing the Commission has just released its proposal for Euro 5 standards for passenger cars and vans. The proposal is clearly insufficient, certainly in the area of NO<sub>x</sub> emissions from diesel cars are concerned – by 2007 European manufacturers will start exporting clean diesels to the US while keeping the dirty ones here. In addition, many Member States are disappointed or even frustrated

about the lack of tools the Commission wants to give them to comply with their air quality obligations.

The technology to clean up diesels is there and will certainly be available for mass production by 2009, the expected entry-into-force of Euro 5. Cost effectiveness considerations should certainly be taken with a very big grain of salt given the huge cost savings that suddenly appeared possible when regulations were implemented, forcing mass-production of after-treatment technology. Near-zero non-CO<sub>2</sub> emission levels of diesel cars are feasible and should be attained as quickly as possible.

### **Aviation and shipping**

Environmental NGOs have welcomed the Commission Communication to include aviation in the EU emissions trading system as a good first step but emphasise that a package of measures is needed to tackle its full and rapidly growing climatic impact and its obsolete fiscal privileges. Most of these measures are dealt with under the section 'Getting the prices right'. In particular securing the right to tax kerosene used by non-EU carriers and extending the use of airport charges to stimulate cleaner aircraft are needed.

For shipping, similar challenges arise. In particular there is a need for a much for intensive use of port charges to stimulate cleaner ships.

## **Annex: the ten questions of the consultation**

### **Shifting the balance between modes, traffic relief and safety improvements**

1. Do you observe a halt in the decline of rail, in particular for freight? What role is played by rail policy?

*The general trend is downward. Only Finland and the UK have more or less managed to stabilize the modal share of non-road modes. Luxembourg, Austria and Ireland have seen a very strong decrease in modal shares of non-road modes. There is, regrettably, no structured overview available of 'best practices' in rail freight policy.*

*Graph: trend in modal share of railways and inland shipping in EU15 freight transport*

2. How is road transport developing, in particular international transport and cabotage after the enlargement?

*n.a.*

3. What is the situation of intermodal/combined transport in your country? What is the position of inland waterways transport (if there is any in your country)?

*n.a.*

4. Are there any developments in congestion and pollution on the main axes, in air transport, in the cities, in particularly sensitive areas?

*See chapter 1. EEA assessments show that air quality along roads is not improving significantly.*

5. What are the trends as regards road safety?

*n.a.*

### **The financial and economic situation of the transport sectors**

6. What is the financial situation of companies within the various modes, including infrastructure managers? How is the industrial structure evolving?

*n.a. We doubt whether this question is very relevant for public policy making.*

7. How are infrastructure investments developing, in particular on the corridors of the trans-European network? What are the financing perspectives of public budgets and charging? Will these perspectives allow the completion of the priority corridors by 2020?

*n.a.*

*We fail to see why it is useful to have information on just the volume of investment. Such information is only useful if accompanied by information on the economic, environmental and social impacts of the investment. Just like any other policy, it is the result that counts, not the money that goes in.*

### **Priorities for the future**

8. What actions of the White Paper need to be reinforced? What are the new actions to be added, in which new fields?

*See the Summary of this contribution.*

9. Which should be the priority actions between now and 2010 (congestion limitation, new technologies, trans-European network, charging, focus on the corridors, new actions on urban transport)?

See the Summary of this contribution.

10. What new additional actions between now and 2010 on safety issues (maritime, aviation, road)?

n.a.

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