

# POSITION PAPER

## Communication “A Sustainable Future for Transport” A Railway Perspective

October 2009

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## EXECUTIVE SUMMARY

CER welcomes the recognition in the Communication that carbon emissions from the transport sector need to be reduced and that energy security needs to be addressed. However, we consider that **insufficient weight is given to environmental issues and that too much emphasis is given to technology and the setting of standards** as providing the main solutions to the emissions problem. Prices, whilst mentioned in the Communication, are given insufficient weight - they are a key part of the solution to transport emissions. Not only will prices that internalise external costs, under the 'polluter pays principle', change the behaviour of the users of the transport system, they will also lead to wider changes in society that will reduce demand for less sustainable transport modes and encourage innovation in technology and operational practices.

To make real progress, it is essential that **emissions targets are established for the transport sector**. These need to be very challenging and the Commission needs to develop wide ranging, ambitious and radical plans to meet them.

**CER supports the liberalisation of the rail sector but considers that it should be introduced as part of a package of measures** including the development of fair competition with other modes and consistency between what the state expects from the railway sector and the finance it provides to pay for the railway sector to meet that expectation. Liberalisation without these other elements has placed some railway undertakings (both incumbents and new entrants) and infrastructure managers, especially those in Central and Eastern Europe, close to bankruptcy.

To make liberalisation work, **strong regulators, independent of the State, are required**, vested with comparable competencies and powers. However, they should be bound by the principle of proportionality, avoiding undesirable developments in railway markets whilst not impairing the functioning of these markets.

**Investment in infrastructure should be designed to promote co-modality**, with each mode doing what it does best. To avoid the development of corridor projects surrounded by dilapidated networks, which may eventually be unable to provide feeder and distributor services, EU funding should be contingent on the Member State producing plans for maintaining the whole network at a standard that meets commercial needs and any requirement imposed by the State.

## 1. INTRODUCTION

In this paper we set out CER's views on the Commission's Communication, "A Sustainable Future for Transport" published in June 2009. The focus of the paper is on the rail sector but we also consider the role of rail in the overall transport sector and its potential contribution to reducing the growing environmental effects of transport.

CER welcomes the Communication as the basis for discussion of future European transport policy and is grateful for the opportunity to contribute to this debate. **The Communication provides a realistic assessment of long term trends and recognises the main challenges.** We hope that the Commission is able to build on this foundation to formulate specific new initiatives which should be taken, over the next 10 years and beyond, to address these challenges.

The Commission has published guidelines on how to respond to the Communication in which it listed seven policy fields for possible intervention. We respond to each of these but we first make some general comments on the context, challenges and objectives which interventions should be designed to address. We also discuss two issues which are not covered in the seven policy fields, liberalisation and regulation, as well as the long term impact of the economic crisis.

## 2. THE IMPACT OF PAST POLICIES

The Communication states that, while it is too early to fully assess the impact of a number of policy measures taken in the last few years, the objectives set out in the 2001 White Paper and its mid-term review of 2006 have been largely achieved.

However, whilst some advances have been made in liberalisation within modes, two other major policy orientations of the White Paper, described there as necessary to achieve the desired modal shift to more environmental friendly modes such as rail, have not been realised in most countries: adequate financing for infrastructure and public service obligations of the railway sector and fair inter-modal competition. As a result, since 2001, rail's modal share has declined (though admittedly less rapidly than before 2001) and the modal split targets of the 2001 White Paper have not been met. **Liberalisation, on its own, cannot revitalise the rail freight business**, even in countries where the market share of new entrants has reached impressive levels.

We therefore consider that the objectives of the 2001 White Paper, which we support, have only been achieved to a limited extent as they affect the rail sector. When formulating policy for the next decade, it must be recognised that there is a **need for adequate financing of the railway sector and a proper framework for inter-modal competition**, anchored in comprehensive, multi-modal national transport strategies which encompass clear priorities. These other conditions have to be pursued as a package, together with the liberalisation of the railway sector, if there is to a significant modal shift to rail.

We agree with the Commission that the objectives set out in the Commission's Sustainable Development Strategy of 2006 have only been achieved to a limited extent and that, whilst the sector has made progress in reducing specific energy use and GHG intensity, this has not been sufficient to offset the growth in

transport activity. We welcome this recognition that the **key weakness of EU transport policy in practice is its incompatibility with the EU's environmental objectives.**

### **3. THE CONSEQUENCES OF EU ENLARGEMENT**

An important change since the 2001 White Paper is that 12 Member States have joined the EU since 2004, of which 10 have railways. The railways in these countries generally have different and more difficult problems to tackle than the railways in the EU15. The poor financial architecture for rail and the unfair competitive conditions, arising mainly from unbalanced infrastructure access charges, has caused rail freight traffic to decline rapidly over the past few years in these states. The financial situation is now getting critical and this will worsen unless action is taken. This decline works against the major goals of EU transport policy: to make the transport sector more sustainable and to create a “single European railway area”. This single European railway area is being threatened by the **emergence of a “two speed Europe” for railways.** Multi-annual contracts between the State and infrastructure managers (discussed below in our response to Question 1) can play a major part in addressing the problem of financial architecture of railways in Central and Eastern Europe.

Paradoxically, in these countries, the decline in traffic may have been aggravated by market opening. Indeed, market entry has been realised in the most profitable market segment of the rail business, the block-trains market, which is generally less at risk of being challenged by road transport. As a result, the rates for block trains have fallen, reducing the self-financing capability of the rail sector.

### **4. THE KEY ISSUE OF SUSTAINABILITY**

#### **Communication's Treatment of Sustainability**

Since the 2001 Transport White Paper, climate change has become a far more important issue and this has changed the context of European transport policy. The key long term challenge for the transport sector is now to reduce the emissions of greenhouse gases. Addressing this challenge will also help address another issue, that of the increasing scarcity of fossil fuels.

We therefore agree with the Communication where it suggests that “lowering of consumption of non-renewable resources is essential for all aspects of transport systems and their use” and that further action is required to reduce the undesired environmental consequences of transport as well as improve energy security.

However, whilst the Communication recognises the importance of the environment and of climate change in particular, it does not in our view give sufficient emphasis to this issue. For example the Communication identifies the likely main drivers of change in the transport sector in the period up to 2050 but environmental/climate change is only listed third.

Also the Commission does not appear to be considering sufficiently radical solutions to the climate change issue. It relies too much on technology as the solution and sees standards rather than prices as the key factor driving technological change.

Future policy for transport must take full account of the long term challenges of climate change. The climate change crisis, like the economic crisis, requires urgent attention but it will be far more difficult to resolve and will need to be the major driver of transport policy for decades to come.

## Ways of Reducing Emissions

The key to meeting environmental objectives, in transport as in other sectors, is to **reduce the consumption of non-renewable energy**. Given the limited sources for renewable energy, achieving the EU's targets will require both reductions in the use of high emissions modes and reductions in specific emissions for each mode. There is also a need to make alternatives to high emissions modes more attractive: this will require investment in low emissions modes, especially in railways.

There is also a need to **better integrate the environmental strategies for the energy and transport sectors** and to identify the synergistic ways in which environmental objectives can be achieved. For example, rail is now the only mode that is able to use renewable sources on any scale. This potential can be fully realised if the electric power used for propulsion is generated from renewable sources, provided this is technologically possible and cost effective for the operator.<sup>1</sup>

Furthermore, solutions may also come from a wider reshaping of industrial, economic, energy and development policies. **The wider drivers behind transport demand need to be addressed**, with better consideration of the root causes of growth from developments outside the sector, where decisions are made without considering the consequences for transport demand and greenhouse gas emissions. Such areas include production outsourcing and urban planning.<sup>2</sup>

Several forms of outsourcing (e.g. manufacturing clothes or peeling shrimps in countries with low labour costs) may reverse if transport costs encompassed external costs.

On urban planning, we expect rail's largest segment, commuter rail to continue to grow as rail is the most efficient mode in large cities and the population of these cities is likely to grow with urbanisation. Public sector support will continue to be required for rail, both for investment and operations. This is partly because the low cost of car transport as experienced by the user encourages inefficient settlement patterns including low density housing which are difficult to serve by rail. To increase the sustainability of cities, urban sprawl must be mitigated by environmentally-conscious spatial planning, supported by both better housing and land planning controls over a long period and full internalisation of external costs of transport.

To properly tackle the challenge of increasing CO<sub>2</sub> from transport, a detailed analysis of the impact of economic activities outside the transport sector is needed. It would need to consider the extent to which these changes outside the sector are influencing factors within the sector.

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<sup>1</sup> E.g., the high burden of ETS on rail may ironically reduce the cost effectiveness of electric power for railways just when it is most needed for environmental reasons. Similar distortions could make renewable fuel uneconomic.

<sup>2</sup> Options are considered in detail in the European Environment Agency's "Beyond Transport Policy", 2008.

## Closing the Emissions Gap

Transport emissions have continued to grow in recent years whilst emissions have fallen in all other major sectors. Growing volumes of traffic continue to outpace reductions in specific emissions. Thus emissions within the transport sector (excluding international aviation and maritime) increased by 27% between 1990 and 2006 (about 1.5% a year).

It will be difficult to reverse the upward trend in transport emissions given that the fastest growing transport modes have the highest specific emissions. This is illustrated by Figure 1 which gives emissions by mode for carrying 100 tonnes of freight from Basel to Rotterdam:

**Figure 1: Freight transport - Comparison of CO<sub>2</sub> emissions by mode**



Figure 1 shows that rail produces a quarter of the emissions of inland waterways and one eighth those of road.

The European Environment Agency (EEA) estimates that, on current trends, projected emissions from the transport sector alone will, by 2050, be more than the total emissions for all sectors combined, if an overall reduction target of 60% is achieved. The situation in transport is therefore having a decisive effect on the ability of the EU to meet its carbon reduction goals. **All drivers of emissions must be addressed:** reducing specific emissions, reducing the rate of growth of transport demand in general and shifting traffic to less polluting modes such as rail.

CER has carried out some preliminary analysis of likely transport emissions over the period to 2020. Our analysis indicates that a major 'emissions gap'<sup>3</sup> of up to 25% will occur in transport in 2020 - this gap needs to be bridged if wider emissions targets are to be met. In order to properly tackle CO<sub>2</sub> emissions from transport, a reduction target specifically for the transport sector should be established, possibly with further targets for each transport mode, and plans are required to achieve these targets.

<sup>3</sup> The gap between what might be achieved with existing programmes of R&D and what is needed to reduce transport emissions by the percentage target agreed for all sectors.

**A combination of economic and other instruments must be deployed** in the transport sector to tackle climate change:

- The Commission should develop a plan for reducing CO<sub>2</sub> emissions from transport in line with global and European cross-sectoral targets (the European railways have already set an example on this by setting a reduction target of 30% for 1990-2020);
- Given the size of the likely emissions gap as noted above, the plan needs to be ambitious and cover all possible major instruments;
- In order to provide incentives for technological innovation, for appropriate investment and for demand management (including but not limited to modal shift to more environmental friendly modes), prices should be adjusted to adequately reflect the costs of transport to society - as soon as is practically possible;
- This internalisation of external costs should not be limited largely to rail, as will occur with the expansion of the ETS, nor should rail continue to be subject to environmental burdens not imposed on other modes ;
- All other possible EU instruments for reducing GHG emissions should be considered including standards (as suggested by the Commission) and increased R&D funding.

Commission proposals for reducing emissions from transport will have to show that the transport sector is playing its part in reducing GHG emissions and helping to meet both the existing 2020 target and any new goals that will emerge from the Copenhagen conference in December 2009.

Also, policies other than transport policy (which have an impact on the demand for transport) will have to be reviewed, such as more concentrating housing and land-use and spatial planning policies which facilitate the access of cycling and walking to stations or help industrial companies to locate close to railway lines).

These policies need to be accompanied by smart prices, reflecting external costs, to provide economic incentives which complement administrative controls.

## Importance of Prices

Post war economies have been based on increasingly cheap transport. But this may change. The increasing shortage of fossil fuels and issues of energy security are likely to become increasingly important factors in policy formulation and corporate decision making in the energy and transport sectors. Their combined effect will probably push up prices and favour modes which are flexible in their source of energy. Rail is the most flexible mode at present as it is the only mode which mainly uses electric power which can be generated from many sources, including renewable ones. Transport prices may further increase because of the resistance to constructing new roads and airports, and the result is that congestion is increasingly affecting the fastest growing modes.

There is also a growing realisation that, whilst transport may be cheap for the individual, it imposes increasing external costs on society. However, this realisation has not yet been translated into practice: **these external costs need to be internalised as a matter of urgency if the EU policy on co-modality is to be at all effective.**

One advantage of the internalisation of external costs is that it can resolve transport problems without costly investment by government. This is because higher prices will reduce demand and will therefore

reduce the need for investment. Also, the revenue from such charges could be used to fund investment. CER sees an **urgent need for a stronger emphasis on smart prices** and a better understanding that in a market economy, **prices are the key drivers for demand management and structural change, including innovation and new technology.**

An illustration of the impact of internalisation of external cost can be obtained from a recent study<sup>4</sup> which reveals how charging trucks for their external costs could contribute significantly to reducing CO2 emissions from transport. With full internalisation of external costs and greater investment in rail, modal shift from road to rail could exceed 10% of total traffic and contribute about 7% to the required reduction in greenhouse gas emissions from transport for 2020. About 60% of all land-borne traffic over distances exceeding 700 km would be carried by rail. Much of this would be combined transport for which the feeder and distribution parts of the trip would be by road, in line with the EU's co-modality objectives. The study also suggests that the road haulage industry would also benefit from an internalisation policy insofar as the logistic chains served by local trucks would enjoy improvements in the reliability of services. This supports our argument for the urgent introduction of Eurovignette.

There is also an issue concerning the use of revenues collected via the internalisation of external costs. In Switzerland, for example, revenues from road tolls on trucks are used for rail infrastructure projects. Investments in rail infrastructure need not be limited to large highly visible projects, like tunnels and bridges. The public funding of railway sidings, linking industrial sites to the main rail network, should become as automatic as public funding of road connections to main road networks. In many countries today, connecting new industrial sites to the road network occurs as a matter of course, fully financed by the taxpayers. But rail connections to the main rail network often have to be funded by the companies themselves, making access of freight to rail disproportionately and unfairly expensive compared to road.

## Modal split targets

We suggest the Commission sets out **precise goals for rail's modal share along with a detailed timetable and a set of targeted measures to reach this objective.** Switzerland has introduced a constitutional provision stating that "Transalpine goods traffic shall be transported from border to border by rail" and states that this objective has to be achieved within ten years. Even though this goal has not been met so far, the existence of an explicit provision has proved to be an effective trigger for political action and a strong argument for further investment in rail infrastructure.

## 5. LIBERALISATION

The main objective of liberalisation is to improve the efficiency of rail through the development of competition. It aims to make the rail sector more efficient and to improve its ability to compete with other modes.

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<sup>4</sup> Institute for Economic Policy Research (IWW) of the University of Karlsruhe in Germany and the French Nouveaux Espaces de Transport en Europe - Applications de Recherche (NESTEAR) (2009), Impact of the internalisation of external costs of road transport. [www.cer.be](http://www.cer.be) see publications section.

However, factors other than intra-modal competition also affect rail's efficiency and its competitiveness with other modes. **High levels of investment and low access charges in Western Europe in general are associated with rail growth** (tonne km grew by 15% between 2000 and 2007) whereas lower investment and higher access charges<sup>5</sup> in Central European countries are associated with low growth (tonne km grew by only 6% between 2000 and 2007).

**Considerable progress has been made in the past decade in the liberalisation of the rail freight sector although progress has been uneven between Member States.** All Member States have introduced open access although liberalisation of freight has had a particularly positive impact in Sweden, the Netherlands, Germany, and Great Britain where the high level of investment has been an important factor in the success of liberalisation. In Sweden and the Netherlands, for example, governments have invested massively in their rail infrastructure and kept infrastructure charges low before liberalisation was implemented. The implementation of these two essential framework conditions for rail not only elicited growth and modal shift but they also made the market more attractive to new actors to enter the market.

The importance of investment is also illustrated by Great Britain. Following the liberalisation that accompanied privatisation of the rail industry, there was initially little investment in infrastructure. But growth was rapid, for both freight and passengers, and the network soon began to run into capacity constraints. The Government therefore decided to provide funding for investment in infrastructure and high levels of investment have since allowed growth to continue and competition between operators to increase.

Conversely, in Romania, where the market share of new entrants has increased from 4% in 2003 to 24% in 2006 (in the then profitable block trains segment), but where investment in the rail infrastructure was close to zero and the charges for using rail infrastructure were high, rail freight volumes fell by 5.5% between 2004 and 2007<sup>6</sup>. As a result, both new entrant companies, on which so much hope had been placed and who had been encouraged to enter the market, are now close to bankruptcy. So while liberalisation was successful initially in creating competition, this success may be short lived.

For passenger services, most countries use public service contracts for some services provided under public service obligations and some allow open access for passenger services, often limited to domestic operators (this is not a major barrier as foreign companies can create domestic subsidiaries). The results of these measures are however mixed.

**CER supports liberalisation as a means to improve quality and efficiency** including through on track competition and its extension to domestic passenger services, providing it goes together with a package of measures. Indeed there is a risk that, if adequate financing (infrastructure and compensation for public service obligations) are not in place, **liberalisation alone may not lead to the growth of the rail sector.**

In some Member States, where financing and fair inter-modal competition is less of a problem, the key issue is to ensure that truly non-discriminatory access is available. For this, effective and independent regulatory bodies are needed and unjustified derogations should not be accepted.

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<sup>5</sup> Access charges are discussed further in the response to Qu2.

<sup>6</sup> There is a shift of 1 year between the reference period for market share increase and the reference period for volume growth, in order to take into account the fact that the impact of market opening is usually felt with a certain delay.

Liberalisation should be introduced as a package with other measures ensuring that infrastructure is sufficient and of good quality, that compensation is paid for Public Service Obligations and that the infrastructure charging mechanism is organised in a fair manner *vis a vis* other modes. If they are not met at the same time, liberalisation leads to unintended consequences, such as loss of market share and eventually the abandonment of fragile markets such as wagonload, which runs completely contrary to EU policies.

## 6. REGULATORY ISSUES

Further liberalisation of Rail Related Services is now on the Commission's agenda and this should take account of the lessons outlined above. In our view, the current rules, relying on existing institutions to oversee the market in Rail Related Services, are capable of giving all types of operators the legal certainty they need, providing that Member States comply with Directive 2001/14 by establishing genuinely independently regulators which can work with competition authorities. Markets should be then allowed to develop within the framework of existing, well tried competition rules.

In the context of liberalisation, non-discriminatory and transparent access to the European railway network has to be guaranteed.

We support the **need to set up independent Regulatory Bodies in order to ensure non-discriminatory access to networks** and thus contribute to establishing fair competition on the European railway markets. To achieve this objective, the Regulatory Bodies in the European Union should be vested with comparable competences and powers comprising at least the following points mentioned in Annex 7 of the Commission Communication on the implementation of the railway infrastructure package (COM(2006) 189):

- Regulatory Bodies must be in a position to monitor competition in the market;
- They must be able to independently and efficiently make decisions on measures to correct undesirable developments in the rail services markets. They must be able to take decisions themselves and, notwithstanding the requirements of judicial review of their decisions, they should not be confined to only proposing measures to be taken by other public authorities;
- The independence required for the regulation of competition on the rail services markets includes that the Regulatory Bodies must have a budget over which they are entitled to decide, and which allows them to recruit a sufficient number of competent staff in order to perform monitoring tasks and investigate all complaints brought before them;
- Regulatory Bodies must be sufficiently accessible for market players. They should publish regular reports about their decisions in order to create transparency in the market on the criteria for their decisions.

Regulatory Bodies should be bound by the principle of proportionality. Their actions must be efficient, consistent and transparent. Their activity should be limited to the **avoidance of undesirable developments in railway markets and must not impair functioning market processes.**

We also support the close co-ordination of Regulatory Bodies in different Member States and would welcome an increased role for the Commission in providing greater transparency in regulation and in the rules defining the relationship between infrastructure managers and railway undertakings in different Member States.

## 7. LONG TERM IMPLICATIONS OF ECONOMIC CRISIS

In addition to the climate change crisis, the world is now experiencing a second crisis, an economic downturn. Whilst there are signs that some economies are now beginning to emerge from the recession, this is not the case throughout the EU. Also unemployment is continuing to grow in most countries and this may be expected to have an effect on passenger demand for some time. Further, most commentators predict that it will be 5-7 years before we return to pre-crisis rates of economic growth. Like the threat from climate change, the economic crisis requires urgent action in the transport sector through investment in sustainable projects which will also help reduce greenhouse gas emissions.

In practice, most member states are providing support not to the industries they own (like railways) but to the private sector, presumably in the belief that they can sort their own industries out later. However, in Central and Eastern Europe, there is a danger that, in some countries, the cost of dealing with the consequences of failures of state owned companies after the crisis may be far greater than dealing with them now. The EU may then not be able to help member states resolve their problems.

It is vitally important that the industry sectors that can really contribute to more sustainable growth in the future (such as rail) are not hit so hard by the recession that they cannot survive until the situation improves. In particular, it is worrying that so many of the efforts of member states to tackle the recession are directed towards the car-related industries, without really demanding any changes to more sustainable business strategies. It is important that growth is based on sustainable transport solutions, capitalising on the strengths of different modes.

Governments **need to take urgent action by creating a more level playing field, by providing their railways with adequate resources** to provide required service levels and a clearer direction on priorities, and by increasing the managerial independence in areas which would allow them to improve their financial performance, such as labour retrenchment and commercial practices. There is a need for more investment in:

- rail renewal, particularly in Central and Eastern Europe;
- small, high return projects to remove bottlenecks in most countries;
- stations (as carried out in Germany under its recovery plan) - some investments can be made quickly and provide improvements in the quality of service to passengers.

The EU should help the railways to make the case for **additional government investment in railways throughout the duration of the crisis on an exceptional and temporary basis** and, where necessary, the EU should provide financial support. The European Commission could also take the lead in the identification of innovative financing mechanisms and in supporting member states to mitigate the fallout of the crisis.

## 8. CONCLUSIONS

We conclude that, on climate change, the following actions are required to address the challenges facing the transport sector:

- The Commission should develop a plan for reducing CO<sub>2</sub> emissions from transport in line with global and European cross-sectoral targets;
- Given the size of the gap between what might be achieved in reducing emissions if all currently envisaged technological improvements to all modes of transport are introduced and the need for transport to make a significant contribution to reducing emissions, the plan needs to be ambitious and to be based on a consideration of all possible instruments;
- In order to provide incentives for innovation, appropriate investment and demand management (including but not limited to modal shift to more environmental friendly modes), prices for all modes should be adjusted to adequately reflect the costs of transport to society;
- This means that full internalisation of external costs should be introduced for all modes of transport and not be limited largely to rail (such as the ETS).

The Commission should also continue the rail policies of the 2001 White Paper, but with renewed vigour. A recent report from the University of Leeds<sup>7</sup> summarises the needs succinctly:

*“Firstly, in the rail sector, the Commission needs to monitor developments, ensure the existing legislation is fully implemented and to disseminate best practice. Full implementation must include, in the first place, the provisions regarding adequate compensation for social obligations and financial equilibrium of infrastructure managers as well as non discriminatory access to the market. Further legislation to solve remaining problems may be needed in the future, but this should be carefully thought through as a result of experience with the existing approach.”*

*“Secondly, the Commission must continue to press for legislation to require full internalisation of externalities for all modes of transport, using simple pricing technologies to achieve approximations to optimal pricing where more complex systems would be too expensive.”*

*“Thirdly, it needs a major reform of the way it encourages and finances investment in transport infrastructure, to give appropriate incentives to member states to implement efficient packages of pricing, structural reform and investment.”*

Market opening and liberalisation should move forward and be implemented as a package together with measures for creating a level playing field between modes and adequate financing of rail, both of infrastructure and of public services.

To help open up markets, well co-ordinated national infrastructure managers can meet the needs for the expansion in international traffic that we expect to continue.

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<sup>7</sup> Nash and Matthews, 2009, Institute for Transport Studies, University of Leeds, European Transport Policy - Progress and Prospects. [www.cer.be](http://www.cer.be) see publications section.

On TEN-T, we support the Commission's more flexible approach, widening the scope from isolated new projects to the strategic pillar and a broader corridor approach of interdependent projects, including improvement schemes and the development of hubs. We consider that substantially higher TEN-T funding is required of at least the 20 billion euros originally envisaged for the period 2007-13. Also, we consider that a truly intermodal network concept needs to be implemented where EU funding is allocated to road projects only if those projects primarily serve short distance road traffic feeding intermodal hubs linked to environmentally less damaging modes.

Rail should play a larger role in the future transport system. The size of the role will in practice depend largely on the price and availability of different energy sources, particularly fossil fuels, and the policies of the EU and different levels of government, particularly in response to global warming. If prices increase, this may lead to many behavioural responses beyond just switching modes. The development and introduction of new technologies and other innovations will depend crucially on getting the pricing signals right. Production patterns and urban structures may also change and localisation and more short distance trade may limit globalisation in some sectors. Once prices are set to adequately reflect costs, the market can be left to decide on these matters and what should be the optimal role of each mode - the essence of the EU's co-modality policy in a market economy.

## 9. RESPONSE TO SPECIFIC QUESTIONS

### Question 1: Infrastructure

***What can the EU do to promote the integration of modal networks as well as their maintenance and upgrade? What should be the priorities for investment? Which measures would allow a better exploitation of the networks and balanced use of different modes?***

For the railways, increasing investment in infrastructure is of primary importance.

The Communication asserts that the next decade is likely to be one of transition for the transport system (technology, investment in infrastructure). We agree that such a transition is needed to address the problems of climate change and growing energy scarcity. We consider that, for this to occur, it is essential that investments are driven by the correct price signals.

The Communication attaches high priority to better integration of the different modes of transport as a way to improve the overall efficiency of the system. We support this, particularly the integration of aviation with high-speed rail which is identified in the Communication as a crucial development.

As for freight transport, integrating maritime and rail transport through better rail hinterland connections is also important but must be embedded in corridor concepts to optimize the medium/long distance benefits of rail (capitalising on the lessons learnt from the Betuwe Line as a key link in the Rotterdam - Genoa corridor).

CER considers that investments should be designed to promote real co-modality. For example, in serving the freight market:

- There should be no or only limited new investments in road infrastructure favouring long distance road freight traffic;
- New investments in corridors should primarily concentrate on rail, inland waterways and short sea shipping;
- Road investments should be focused on feeding other more sustainable modes, and should, to the extent possible, be selected and designed to serve short distance road traffic - on toll roads, pricing could be used to discourage long distance freight traffic from using roads.

A truly intermodal TEN-T network cannot comprise various modal trans-European networks overlapping each other. Each mode should take its rightful place, in accordance with its specific unique selling points in order to optimise the overall transport network. EU funds should be allocated accordingly. If member states wish to launch projects that are primarily designed to promote long distance road freight transport, no EU funds (TEN-T, Cohesion and Regional funds) should support these investments.

We support the Commission's more flexible approach to TEN-T projects, widening the scope from isolated new projects to a corridor approach of interdependent projects including improvement schemes and the development of hubs including intermodal facilities. The current design and implementation of TEN-T and core infrastructure networks rarely incorporate the development of inter-modal transshipment centres in support of co-modality concepts and CER considers that changing this should be a priority.

Whilst corridor projects are clearly important, they should not be developed in isolation from the rest of the network which represents alternatives to main lines or feeds the core network. In some countries, the main lines are very congested and run through built up areas where there is sensitivity to noise. In these countries, it is important to develop alternative routes. In other countries, limited resources are used for TEN-T projects and the rest of the network is neglected and will not play its feeder and distributor role unless it is adequately maintained.

Financing through TEN-T and structural funds provides the European Commission with additional leverage to require beneficiary governments to embark on Multi-Annual Maintenance Contracts (MACs). By requiring the parties (government and infrastructure managers) to enter into a transparent contractual relationship which spells out the expected maintenance and renewal levels and which provides the necessary funding, rail infrastructure investments are protected from neglect and deterioration. This should be extended to cover the whole network which is to be kept open although standards of maintenance should reflect market needs and any requirements imposed by the State - these standards may be lower on some lines. Putting in place Multi-Annual Maintenance Contracts (MACs) should be a condition for EU support.

Other suggestions for TEN-T are as follows:

- Decisions on TEN-T should be based on long term strategic planning and more **rigorous market and economic analysis**.
- The **necessary infrastructure funds** should be made available; European and national priorities should be aligned on the basis of traffic flows and market needs.
- The EU budget dedicated to TEN-T should match EU ambitions, calling for an **increase of the budget and of co-financing rates**.

- Funds should be concentrated on projects giving a **“European value”**, i.e. aiming at **suppressing bottlenecks and increasing interoperability**.
- There should be a **stable “core TEN-T network”**: ERTMS rail corridors could be the backbone of such a core network, provided it is extended to more European countries, **taking into account market and environmental requirements**.
- **Modifications of the network should be allowed** during the TEN-T budgetary period, according to market needs.
- The **environmental criteria** should be given more priority in project assessments.
- Fiscally constrained countries should be allowed a **phased approach to meet full TEN-T standards** in infrastructure performance, reducing the risk of unaffordable over-allocation of national resources to TEN-T projects at the expense of adequate maintenance of other core network sections - standards should reflect market needs.

To reduce transport emissions, investment should be made in rail electrification in order to increase the share of rail transport powered by electricity (now 50% of the network is electrified and 80% of traffic is hauled using electric power). The EU should fund such investments on cross border links.

However, investment should not be limited to rail lines. Investment in rail freight sidings can have a major impact on modal split by giving companies a choice of mode where none existed before. Most rail freight in Europe today is siding to siding and does not involve road at all. Despite the growth of intermodal transport, this is unlikely to change. To increase the size of this siding to siding market, more industrial sites need rail connections to main lines. In addition to attracting long distance traffic from road, intermodal rail-road services, which involve expensive trans-loading between road and rail, could also be reduced by constructing such connections. Modal shift from intermodal transport to rail is especially likely where road haulage distances to terminals are long intermodal costs are higher in such cases.

On the other hand, we expect the intermodal sector to continue to be the fastest growing freight market for rail. For example, in some countries there is considerable potential in the retail and supermarket sectors. Freight can be consolidated into train loads and shipped by rail to distribution centres. By locating distribution centres near rail terminals, this will further reduce the environmental damage caused by the “last mile”. This improves the green credentials of the customer and reduces costs.

But sidings and terminals are rarely commercially viable at current price levels without government support, either financial or through planning controls. Provision of sidings is necessary to provide a level playing field with road as connections between industrial sites and main roads are usually provided by public authorities, whereas this is not the case for rail. Governments in some countries partly fund the construction of sidings and terminals and we expect this practice to spread in response to increasing environmental concerns. Moreover, the European Union should encourage its member states to develop land-planning and industrial policies that favour the installation of new industries close to railway lines, in order to favour direct rail access, possibly without road links, and to fund construction of connections to main lines, and terminals.

In passenger transport, given increasing urbanisation, commuter rail will continue to be the main rail passenger market, in competition with car and bus. The intercity sector will also grow with the expansion of high speed rail. However, e.g. high speed lines involve huge investments and costs. Therefore, state

intervention will continue to be required, to increase the price of alternative modes to fully reflect external costs, and to provide financial support for investment.

### ***Co-ordination of Infrastructure Management***

The Communication raises the possibility of creating transnational infrastructure managers which “may reduce frictions”. We agree that better co-ordination of infrastructure managers is needed but, before drawing conclusions as to the best solution, we consider that this should be based on experience with the development of rail freight corridors in the coming years. We suggest that the Commission monitors this and that a final decision is made on the basis of results.

## **Question 2: Funding and pricing**

### ***What can the EU do to ensure that prices in transport correctly reflect costs to society? What actions should be considered for implementing the ‘polluter-pays’ and ‘user-pays’ principles in transport?***

We welcome the Communication’s support for smart prices, reflecting not only the internal but also the external costs of transport. Internalisation of external costs would allow cross financing from more polluting modes to fund investment in less polluting ones. Switzerland provides an example of how modal shift is achievable with the right policies: charging for external costs and using the proceeds to support investment in rail infrastructure.

However, partly because of poor co-ordination between policies, there is a lack of synergy in EU legislation which contains contradictory instruments. As a result, there are a number of perverse features working against each other and these objectives:

- The current Eurovignette Directive prevents any member state from charging for the external costs of heavy goods vehicles;
- Some features of the Emission Trading Scheme (ETS) have a perverse effect on transport emissions by penalising European railways because of the rail sector’s use of electricity. The value of allowances is passed on by the electricity generators to customers and a study by INFRAS<sup>8</sup> estimates that, from 2013, there will be an additional annual cost to the rail sector of more than 500 million euros. No other transport mode is affected by ETS so far. Aviation will be included from 2012, but it will only pay for 15% of its allowances;
- The Energy Tax Framework Directive provides for Member States to exclude rail from energy taxation, but only on a voluntary basis, and many Member States have not done so.

Also EU transport and environmental policies are poorly co-ordinated with national policies for taxation - for example, in Germany, cross border aviation is tax exempt whilst international rail is subject to VAT. Furthermore, fair competition between modes is not possible until the legal and fiscal *acquis communautaire* is adjusted so that the one sided advantages in favour of one specific mode are removed. An example is the exemption of air transport from paying fuel tax, whereas rail usually pays fuel taxes.

The formation of a Transport Infrastructure Fund in a number of Member States and Switzerland has been helpful in increasing investment. The EU may wish to participate in the funding and establishment of such

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<sup>8</sup> INFRAS (2009) Energiepolitische Rahmenbedingungen (in German).

funds, especially in Central and Eastern Europe. These funds could be funded from the revenues from the sale of ETS allowances and Eurovignette and oriented to promote the development of sustainable transport.

### ***Track Access Charges***

In Central and Eastern Europe (CEE) and some countries in Western Europe, Governments have for many years not provided adequate funding for rail infrastructure investment and maintenance. As a result, operators are expected to pay (through high access charges which make rail uncompetitive with road) for access to sub-standard infrastructure. In addition, in some countries, especially in CEE, the under-compensation of passenger operators for public service obligations results in their inability to pay track access charges, putting further pressure on infrastructure funding. The unwillingness of Governments to provide adequate funding, combined with unfair competition from road, results in deteriorating infrastructure quality and high rail tariffs. Rail's competitiveness is therefore declining rapidly and rail is rapidly losing modal share (freight in CEE fell from over 40% in 2000 to less than 30% in 2007). As a result, debts are increasing.

The Communication notes that investment in rail needs to increase to provide capacity to accommodate the growth in demand for rail, but the after-effects of the economic crisis and the increasing demand for funding from other sectors as a result of the ageing population, may make it more difficult to increase government funding for transport. Other means must therefore be found to fund investment.

We note the Communication's support for more self financing in the transport sector. This means that charges for the use of infrastructure would need to be increased. This needs to be carefully considered so as not to further disadvantage rail. Charges should primarily be increased on the modes with high external costs. Increases in track access charges for rail should be considered against the aim not only of maintaining but of gaining traffic, thereby complying with EU policy to improve rail's modal share.

Full self-financing is not desirable for rail. There are major economies of scale in rail, especially in infrastructure which mean that the marginal costs are far less than the average costs. Public sector support is therefore desirable to optimise the use of the transport system. Also, revenue from infrastructure charging on less sustainable modes should be used for cross-modal financing in favour of environmentally sustainable modes such as rail.

For the growing international traffic in the EU, there are problems arising from the lack of predictability of track access charges, which makes it difficult to develop and sustain markets. Also the different structures of charges in the different member states, for example with some charging by train and others by passenger for the same service, make it difficult to optimise service provision. These could be areas in which the EU might play a role by ensuring infrastructure managers publish charges well in advance and that there is more harmonisation of the structures of charges.

### **Question 3: Technology**

***Many technologies are being developed or are already available to improve the environmental performance of transport, increase safety and reduce congestion and dependence on oil. What can the EU do to accelerate the development of these technologies?***

In our view, the question is too narrowly defined. The wider issue is how to ensure that innovation takes place. Innovation is not just a matter of technology but it may, for example, cover new organisational methods, such as new innovative ways of timetabling, which do not require changes to technology.

The Communication attaches high priority to accelerating the development and deployment of innovative technologies: “New technologies will provide new and more comfortable services to passengers, increase safety and security and reduce the environmental impacts.” It also emphasises the importance of investing more in R&D and, separately, “smart prices” reflecting internal and external costs.

However, the CO<sub>2</sub> and environmental impact of innovative alternatives must also be properly taken into account, following a scientific and thorough “life cycle analysis”. Life cycle analysis takes into account all the impacts of an alternative product or technology by considering not only the impact of using it but also the impact of producing it (including raw material extraction activities, distributing it and managing its end of life). A typical example of an innovation which can turn out to be more damaging to the environment than beneficial is “bio-fuels”, produced at the cost of deforestation, depletion of agricultural surfaces and water resources. In this respect, the objective of the European Union that bio-fuels should represent 10% of energy use by 2020 should probably be questioned.

Moreover, the Communication does not mention that correct pricing has a key role in encouraging R&D. For example, a mass produced electric car is nearly with us, largely because of the expectation that fuel prices will remain here over the long term. But it could have been with us much earlier. In 1996 electric cars began to appear on the roads of California but never made mass production because the manufacturers could see no mass market for them given low fuel prices.

The Communication therefore relies too much on technology as the solution to the problem of climate change and sees standards rather than prices as the key factor driving technological change - whilst standard setting has a role to play, we consider that pricing is a more effective way to promote technological change and other innovation. Innovation may be defined as “a new idea which finds a market”. The right pricing of transport will provide opportunities for this.

There are many prospects for new technologies and other innovations to cut rail costs and further reduce rail’s environmental effects whilst at the same time improving services. These include:

- Higher levels of standardisation of railway components to reduce life cycle costs and improve the flexibility and hence the availability of trains;
- Increased capacity of the railway system through:
  - More energy efficient (including automatic) driving
  - Longer and higher capacity trains
  - Improved signalling to allow greater traffic density without compromises to safety
  - Increased speeds
  - Increased loading gauge;
- Reduced weight of rolling stock allowing higher payloads - composite materials could be a potential way of cutting costs and emissions and increasing capacity, reducing damage to tracks and thereby lowering the track access charges required;
- More intensive use of telematic applications: integrated traffic management systems will optimise the use of transport capacity and speed, thereby reducing energy consumption and emissions;

- Enhanced interoperability and telematic applications will also facilitate the streamlining of border crossing processing, e.g. through advanced notification and harmonized documentation;
- Other technologies, mainly to reduce environment impact, include:
  - Diesel fuel substitution - electrification of lines
  - Increase of energy efficiency (e.g. regenerative braking, energy storage onboard, use of metering)
  - Green diesel locomotives.

We agree that interoperability is crucial for the future competitiveness of international rail transport. It is however indispensable to give adequate consideration to its economic consequences (costs and benefits). Interoperability must constitute a real advantage to rail in facing fierce intermodal competition and must not become a burden for rail. Such solutions should not be chosen just because they are technically possible. The key criterion must be economic efficiency. The economic consequences of ERTMS would be improved if migration were carried out in a more co-ordinated way so that the lag between making investments and obtaining returns on that investment were reduced. It is also necessary to ensure that the costs of ERTMS are allocated in a more equitable way, ideally in proportion to the benefits.

It would certainly facilitate technological development if it were not subject to extensive legislation down to the last specific detail. If legislation could be limited to the general framework, to be filled with technical content by the sector and standardisation bodies, more practical, economic and market oriented solutions could be generated.

Improvements in environmental performance and reductions in road congestion will be enhanced by the application of intermodal Intelligent Transport Systems and Telematic applications for combined transport. These techniques should be implemented as soon as possible with full mutual compatibility across all transport modes. Galileo will play a significant role here and thus the system launch/deployment should be accelerated.

The introduction of low-cost freight tracking devices (e.g. RFID transmitters) will enhance the attractiveness of rail freight services for shippers. Such devices can also store information on type of cargo, value, etc for custom purposes which can speed up border crossing processes.

Railways themselves can further improve their safety record by broader implementation of ERTMS and new techniques for maintenance of safety critical components of vehicles (e.g., wheelsets, brakes). These steps require broader EU support since they are investment intensive.

CER supports a role for the European Railway Agency (ERA) on all tasks related to the homologation and certification of rolling stock. Moreover, ERA must have a stronger role in the coordination and monitoring of National Safety Authorities whose processes need to be better aligned and whose different standards impose costs on the industry. However, parts of ERA are already overloaded with their existing responsibilities and there is an urgent need for it to prioritise its activities and reallocate resources accordingly.

## Question 4: Legislative framework

***What can the EU do to further improve working conditions, health, safety and security standards in transport and the rights of passengers? In which sectors should market opening be pushed forward and how? What measures of a regulatory nature should be considered to reduce the transport sector's environmental impact?***

Our main concerns on the legislative framework in the areas listed concern passenger rights. In our view, there is already too much overly prescriptive legislation in this area in the rail sector, and this legislation is much more far reaching than in other modes. The railways are under a disadvantage in having to provide more compensation to passengers than other modes and this must ultimately lead to modal shift away from rail as railways have to raise their prices to cover the compensation cost. Over-regulation also reduces the development of intra-modal competition, for example from cheaper no-frills operators, and innovation in marketing.

There is a need for a consistent and less prescriptive legislative framework across all modes, ideally contained in a single legal instrument. This will not only ensure a level playing field but will also make it easier for consumers to understand their rights.

A general observation on the legislative framework is that we strongly support enhanced transparency in decision making but do not consider that comitology procedures are sufficiently transparent. Stakeholders are not involved and this can lead to uninformed decisions being made.

CER seeks liberalisation and the development of a level playing field within rail at EU as well as at national level as parts of a package. Other parts of the package should include adequate investments in rail infrastructure and fair inter-modal competition.

## Question 5: Behaviour

***Sustainability of transport also depends on sound planning and on a change in transport habits. Are there measures that can be taken at EU level to improve accessibility and modify transport needs and behaviour?***

We support the EU's efforts under Framework Programme 7 to try to change travel behaviour through better information, especially where this may have wider impacts on attitudes. However, such efforts have not so far been very successful in influencing behaviour and they are no substitute for simply making rail more attractive relative to other modes. Whilst better knowledge and understanding certainly play a role in changing behaviour, price is again the key instrument.

More generally, we consider the Communication does not acknowledge the importance of consumer behaviour across a whole range of areas which may affect the demand for transport. The Communication does consider ageing and migration, but other factors determining consumer behaviour are also important. We have noted elsewhere the importance of urban planning but consumer choices on residential and employment locations, and types of leisure activities can have dramatic effect on the demand for transport and therefore on the policies required to deal with that demand.

## Question 6: Coordinated action

***Effective action requires coordination between different levels of government: what can the EU do to facilitate this process and avoid inconsistent approaches.***

We have largely answered this question in our response to Question 1.

We would add that legislation is only one tool of the political arsenal and that it may be overused by the European Commission. Political action can express itself in a more direct way, as is very often done at a national level, by simply mobilising stakeholders through incentives and consensus building. This is done, for example, through the actions of the “High Level Coordinators” on TEN-T projects. The European Commission should use actions more, and legislation less. This may call for some modification of civil servants profiles, less oriented towards legal expertise and more oriented towards project management and support.

## Question 7: The external dimension

***The transport sector is increasingly becoming more international. Which actions in the transport sector can help to foster relations with our neighbouring countries and encourage sustainable growth there? What measures can help EU industry and transport operators to thrive in the international context? How can the Union better contribute to sustainable global governance?***

The Communication suggests that increased economic integration and migration from neighbouring countries and Africa will be key challenges. We already see signs of development of the railways along these lines with overland Euro-Asian rail transport proving an alternative to shipping for Asian markets. For example, China is currently considering options for a rail bridge to Europe in order to avoid its congested ports and the long travel times by sea. CER regards this as a major opportunity for railways over the longer term.

At the same time, however, several Central Asian countries are heavily investing in developing road corridors. In particular, landlocked countries seek to lower the cost of access to deepwater ports. Growing environmental and energy conservation concerns may increasingly reduce the attractiveness of the road option and, combined with good larger volume freight consolidation options (running one train instead of 40 trucks between the port and the landlocked country), railways offer a far more efficient alternative. The Commission could take a lead in promoting rail based alternatives, linking pan-European networks with Central Asian networks.

We consider that the best approach here is to capitalise on lessons learnt in the development of the European core transport networks, which frequently included inefficient ‘duplicated’ core links by providing both road and rail infrastructure. The development of an overland Euro-Asian infrastructure network should instead be anchored in the concepts of sustainability and co-modality as outlined in our answer to Question 1.

## Disclaimer

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