

A sustainable future for  
transport: Towards an  
integrated, technology-led  
and user-friendly system

UNIFE contribution  
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*“If the EU is serious about meeting its CO2 emission reduction targets of 20% by 2020, the concept of co-modality cannot be sufficient. A comprehensive overall emission reduction goal for the transport sector is needed.”*

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## Summary

This position paper provides a response to the European Commission's public consultation on the Communication "A sustainable future for transport: towards an integrated, technology led and user-friendly system". UNIFE very much welcomes the initiative to review European transport policies and to set policy goals for the coming years that aim to provide an adequate response to the challenges of the future.

While UNIFE agrees with the European Commission's analysis to a large extent, it believes however, that especially the challenge of climate change should receive the utmost attention. Achieving an emission reduction and a more sustainable European transport system should be the policy priority of the EU in the years to come.

To attain this goal, UNIFE lays out a number of policy measures that should be taken. These range from increased investments in new and existing railway infrastructures to adequate charging and taxation policies. The internalisation of external cost will become a political imperative. Research policy should become better coordinated and market opening and regulatory reform of the railway sector further pursued.

In parallel, more sustainable transport behaviour amongst citizens and shippers should be incentivised through the right pricing signals and an adequate offer of transport solutions. Finally, the EU should not hesitate to promote the benefits of sustainable transport solutions globally.

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## *Introduction*

UNIFE, the European Rail Industry, welcomes the European Commission's initiative of devising a new long-term strategy for the European Transport Policy (ETC) and the broad consultation of stakeholders. UNIFE has already laid out its broad transport policy vision during the first consultation of stakeholders in March 2009. This contribution will therefore focus more concretely on the questions raised by the European Commission in its guidelines on how to respond to the Communication "A sustainable future for transport: Towards an integrated, technology-led and user-friendly system".

### *European transport policy in the context of climate change*

On a more general note, however, UNIFE would like to point out the need for bold transport policy solutions and visions, if the challenges of an ageing population, migration and internal mobility, the environment, the increasing scarcity of fossil fuels, urbanization and globalization are to be met adequately. Such visions and solutions require a clear weighting of the challenges according to their importance. **In this respect, we consider the environmental challenge of climate change to be vital. In the upcoming White Paper on Transport Policy this problem therefore clearly needs to be identified as a separate issue, rather than only in conjunction with the growing scarcity of fossil fuels.** While energy supplies and security are highly important, they are not the most pressing reason for the need of a drastic reduction of energy consumption and CO<sub>2</sub> emissions. The transport sector today produces approximately 24.7 % of Greenhouse Gas emissions (GHG). **While other sectors have managed to decrease emissions since 1990, those of the transport sector have in fact increased.**<sup>1</sup> Rail is able to use all sources of electric energy and is therefore in the position not only to reduce emissions from transport, but also fuel dependency.

Thus, even though the Communication does mention shifting transport to the most adequate mode of transport, more emphasis should be laid on a modal shift to less polluting modes of transport, notably rail. Considering that there are large stretches of underused capacity in most Member States, much can be said for the potential of rail to shoulder a larger modal share; a shift that would eventually also decrease GHG emissions from the transport sector.

**If the EU is serious about meeting its CO<sub>2</sub> emission reduction targets of 20% by 2020, the concept of co-modality cannot be sufficient. A comprehensive overall emission reduction goal for the transport sector is needed. This goal should then be complemented by concrete policy measures that contribute to meeting this goal**

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<sup>1</sup> European Commission, DG TREN, Statistical Pocketbook, 2009.

and have been evaluated according to their efficiency and economic viability. Policies inducing modal shift clearly figure among such useful measures!

Inducing a modal shift requires on the one hand a number of political measures that will be outlined subsequently. It will also require a new consideration of the concept of mobility, especially in passenger transport. The Communication as it stands puts much emphasis on the need of individuals to get to A from B. This is certainly right, but more emphasis should be put on the need for alternative less emission-intensive modes of transport that foster this mobility.

### **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 a balanced use of the different modes?*

In order to meet the challenges posed to the European transport system in the coming years, a better integration of the different modal networks is vital. However, rather than a “balanced use” of the different modes of transport, a most effective use in terms of environmental, social and commercial aspects needs to be found. This implies a fundamental rethinking in terms of the overall share of each mode if the EU is to meet its environmental targets for 2020. While roads are becoming increasingly congested, a large number of Member States demonstrate a very low intensity of use of their railway infrastructure - a trend that needs to be reversed. On the other hand, a number of bottlenecks in rail infrastructure have been identified, where investment should be primarily concentrated.

For passenger transport the most important aspect is that swift connections between different modes of transport are needed. This requires the creation of transport hubs as well as the use of IT technology across all transport modes to facilitate better integration. One example would be the large scale introduction of integrated ticketing solutions that is already on offer by a number of operators across Europe.

In freight transport, a similar logic applies. If rail is to take up a more prominent role in the modal split, a better coordination with other modes of transport is needed. In addition, in order to enhance the reliability of freight transport smart traffic management rules need to be found so as to enhance punctuality and thus overall efficiency of freight transport. The Commission proposal on the creation of a competitive rail freight network has been an important step in the right direction; these corridors should be business-oriented, have harmonised priority rules and involve long and medium-term coordination of investments. In addition, industrial sidings should receive adequate funding. This would allow for a further modal shift towards rail and allow for more efficient transport. Furthermore innovative highly automated

connections between freight nodes like airports or harbours and cities in their vicinity, comparable to solutions for passenger transport, should be fostered as well as concepts for increasing the speed of long distance rail based freight transport.

For the integration of networks it is also essential that no mode is favoured over the other, as is currently the case. In both EU-15 and EU-12, the road currently receives the lion share of investments.<sup>2</sup> Especially considering the chronic underfunding and the state of the railway infrastructure, particularly in Central and Eastern Europe, this tendency needs to be reversed in order to find a more adequate modal balance that reflects the future challenges to the European transport system. Not only should the share of rail investments be increased, but infrastructure managers should be provided with sufficient means to maintain their network and prevent any further deterioration of rail infrastructure. Some schemes, such as multi-annual contracts, have been encouraged by the EU. They should become binding to allow for adequate maintenance in all Member States.

At EU-level, this means in particular that TEN-T funding should continue to foster rail as a more environmentally friendly mode of transport and that regional aid should be better targeted to environmentally-friendly transport modes. Choices laid out in the future TEN-T Guidelines should reflect this orientation.<sup>3</sup> The TEN-T budget should also be increased in the next financial perspectives and regional aid for rail transport should at least be maintained at current levels to complete the TEN-T network on schedule. Furthermore, a special focus of the TEN-T Policy should lie on the interoperability of the system and ERTMS, as well as the creation of a truly European very high speed network.

## **2. Funding and pricing**

*What can the EU do to ensure that prices in transport correctly reflect the costs to society? What actions should be considered for implementing the 'polluter-pays' and 'user-pays' principles in transport? What should be done with the revenues thus obtained?*

UNIFE welcomes the intention to make use of pricing signals to guide the behaviour of citizens and businesses. At present, transport prices unfortunately barely reflect real cost to the society. The external costs of transport are largely ignored. If the EU does however, aim to create a sustainable transport system for the future, these urgently need to be internalised. This would also provide a more level playing field between different modes of transport as transparent and effective pricing allows for more economically viable choices.

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<sup>2</sup> Source : International Transport Forum, OECD.

<sup>3</sup> Please also refer to the UNIFE position paper on the TEN-T Green Paper, April 2009.

Recently, a number of initiatives have been taken by the EU that can be regarded as a first step. However, much remains to be done to fully integrate these costs and by doing so create a level playing field between all modes of transport.

The Greening of Transport Package including the Revision of the Eurovignette directive and the Communication on rail noise abatement measures were published in July 2008. However, the internalisation of external costs needs to extend to all costs, i.e. air pollution, noise, congestion, accidents and CO2 emissions. Furthermore these schemes cannot remain voluntary in the long term but have to be made compulsory if they are to have an effect and not to distort competition. A subsequent extension of these schemes to private cars may also be envisaged.

For rail, the most important external cost is noise. The introduction of noise differentiated track access charges provides an important incentive for moving towards more silent technologies and allows maintaining the good track record of rail when it comes to external costs.

In addition taxation for the different modes of transport should be reviewed. While tickets for a train may include VAT charges in some Member States, this is not the case for international air tickets. The same applies to fuels. While a diesel train will usually be charged fuel taxes,<sup>4</sup> this is not the case for the kerosene used by planes. Aviation is generally exempt from both taxes. If policy makers expect passengers and shippers are to make an informed and sustainable choice of transport modes, taxation and charges should at the very least, not favour less environmentally friendly modes of transport.

The revenues coming from such a charging and taxation schemes should be earmarked for sustainable transport infrastructures such as rail. This becomes all the more important if the transport sector is expected to become self-financing in the future as outlined by the Communication.

### **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 and deployment of these technologies?*

Rail transport as such provides an answer to the need for improving the environmental performance of transport, to increase safety and to reduce congestion and the dependence on oil. Rail provides sustainable solutions to these challenges. If modal shift occurs, it improves the overall performance of the transport sector.

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<sup>4</sup> The use of electricity for rail is also taxed in some Member States

Moreover, the European rail industry is currently actively involved in developing solutions to further enhance the environmental performance of rail transport. A good example would be energy consumption, where the rail industry has managed to extend its advance over the car manufacturing industry in the past years. While power consumption of private cars has gone down by 13% on average since 1995, that of passenger trains has decreased by 21%.<sup>5</sup>

UNIFE member companies spend some 1 bn € per year in competitive research. Through its participation in the European Rail Research Council (ERRAC) and through the coordination of EU funded projects on non-competitive research, further important actions are taken in order to promote the development of rail and to make it meet the challenges of the future.

ERRAC developed a 'Strategic Rail Research Agenda' that informs about the planning of research programmes across the EU. In 2007 the updated Strategic Rail Research Agenda 2020 (SRRA) has been published. Today activities of ERRAC focus on the elaboration of annual concrete and detailed roadmaps for future common European Research activities. These enable a step by step approach to reach the goals of the Strategic Rail Research Agenda 2020.

In order to keep up these efforts and to strengthen them even further, UNIFE proposes to take into account the annual ERRAC roadmaps in EU transport policies. They represent updated and concrete measures needed in order to meet the technical challenges of the Future of European rail transport.

In terms of policy coherence, UNIFE proposes a close cooperation in terms of policy priorities and a better coordination of research activities between different Directorate-Generals of the European Commission. At present, research priorities do not always reflect the political goals pronounced elsewhere.

Again these political priorities should also be reflected in the funds allocated to railway research. Expectations in and financing for railway research do not correspond. This discrepancy is becoming ever more visible during the current economic crisis, where huge additional financing is granted to the automotive sector but not to the rail sector.

Finally, the EU can contribute to an accelerated deployment of the technological solutions resulting from an EU-funded R&D project that helps to improve the environmental performance of rail, increase safety, and reduce congestion or the dependence on oil. Financial support for a specific upgrading/replacement of current rail technologies is a logical follow-on to current research and transport policy goals. This financial support may take the form of lowered track access charges to provide

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<sup>5</sup> Source : Allianz pro Schiene

bonuses for those who use the advanced and most likely more expensive technology (like its intended for noise reduction).

ERTMS is an excellent example in this respect. The Commission strongly supported its development by the rail industry and is now encouraging deployment through the ERTMS European Deployment Plan. Funding for the implementation of the system is provided in the framework of the TEN-T budget. This financial and political support should be sustained in the future in order to assure adequate implementation of the system even beyond the lines currently included in the deployment plan.

#### **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?*

In the rail sector market opening has been a declared goal of the European transport policy during past years. While important progress has been made that has borne its fruit in the most liberalised Member States, rail market opening across Europe remains uneven and sketchy. The opening of the infringement procedures against 24 out of 27 Member States for failure to adequately implement the first railway package is an example in this respect. Even implementation of legislation in all Member States is all the more necessary as otherwise there is a danger of market distortion where some companies may end up benefiting from protected home markets while expanding in others.

However, it would be short sighted to state that implementation of the first railway package would solve all problems related to rail market access. Much has happened since the adoption of the first railway package, it is therefore necessary to adapt the texts to current needs and extend their scope. Therefore, opening of domestic passenger transport needs to be addressed in the upcoming Recast of the first railway package. The same applies to the role and competences of regulatory bodies. They need to be independent, sufficiently staffed and have ex ante and ex post powers. The transparency of market access and pricing needs to be enhanced and extended to rail related services. It may also prove worthwhile to look into the markets of rail related services and to assess whether the situation could be improved. In the long term, it may also become necessary to reflect on whether the model of liberalisation that has been chosen by the EU can reasonably be achieved by the current language, or whether provisions on the separation of infrastructure and operations may not need to be rewritten.

Environmental regulation to improve the environmental impact of the transport sector will also be necessary in the future. In correspondence to the goal of setting adequate

price signals and reducing CO2 emissions, all transport sectors should be included in the European Emission Trading Scheme (ETS).

In the passenger segment, be it rail, air or the automotive sector, it may also become necessary to reflect whether achievements in terms of energy consumption or weight should continue to be used for improved passenger comfort, as a trade-off exists in this respect.

This environmental regulation should be elaborated in cooperation with the relevant sectors and be as much as possible adapted to the different markets. The Non-Road Mobile Machinery Directive (NRMM) despite its laudable aims currently causes serious problems for the European diesel locomotive markets in this respect as its provisions are based on large consumer markets rather than the project-based business cycle of the railway industry.

UNIFE therefore considers it the most viable option, if the European Railway Agency (ERA) would start to take up its role in environmental regulation as made possible by the Interoperability Directive. The Noise TSI (Technical Specification of Interoperability) is a first example of such regulation. More of this kind should follow that enhances the environmental performance of the sector while not disrupting markets.

Another aspect of regulation where progress should be made is the authorisation of rolling stock. Indeed, although much progress has been achieved by the rail industry in terms of interoperability of its products, a large number of national administrative and bureaucratic obstacles persist. The cost of a type certification varies from 1 to 5 million Euros for each country where vehicles have to be authorised. The new Directive on Interoperability takes important steps in the right direction. However, National Safety Authorities remain the only ultimate safety authorities. UNIFE therefore recommends extending the competences of the European Railway Agency (ERA), so as to take the full benefit of the development of a harmonised European system. In the coming years, all possible political and above all legislative efforts should be made in order to strengthen the role of the ERA as a central authority and to convert it into a European certification authority, somewhere along the lines of the European Aviation Safety Agency (EASA).

## **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?*

For passenger transport, in order to attain modal shift towards more environmentally means of transport, to improve accessibility and to modify transport behaviour the EU

should follow two main approaches: encourage the use of public transport, in particular rail transport.

These objectives should be addressed through a combination of demand-side, supply-side measures and behavioural initiatives. On the supply side, the offer of public transport should be improved<sup>6</sup> and an adequate parking policy in conjunction with public transport should be promoted. For mainline transport, infrastructure investments have shown to have a powerful effect on passenger behaviour. The best examples are VHS lines: The modal share of rail doubled between Paris and Brussels after the opening of the VHS line.<sup>7</sup> Projections for the newly opened Madrid-Barcelona line are similar.<sup>8</sup>

On the demand side, pricing mechanisms have a powerful impact on behaviour. These include a reasonable adaptation of transport pricing policy and the development of infrastructure charging schemes (urban or motorways) to adequately take into account the external costs of each mode of transport. The London congestion charge sets a positive example in this respect. Finally, behavioural initiatives, such as the promotion of walking and cycling in conjunction with the use of public transport, the implementation of zones with reduced speed for vehicles and education initiatives may modify citizens' habits.

As for freight transport, price signals are certainly the most important in the modal choice of shippers. Therefore, prices of each mode should adequately reflect their real cost to the society (see answer to question 2). From a supply side point of view, smart traffic management and better cross-border cooperation as proposed e.g. by the proposal for competitive rail freight should only heighten the attractiveness of rail freight transport.

## **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? Many of the challenges for transport will be in the urban environment: are there specific measures the EU could take to help local authorities?*

In order to avoid inconsistent approaches, the EU should make all efforts possible to ensure that existing legislation in the field of transport policy is adequately implemented. A lack of sufficient implementation may lead not only to market distortions but also to suboptimal effects in terms of the environment. Therefore the internalisation of external costs of transport (such as Eurovignette) should be made compulsory in all Member States.

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<sup>6</sup> In particular: very high speed rail for intercity connections; metro, tram and light rail for urban transport.

<sup>7</sup> UIC, 2005

<sup>8</sup> Projections are at 46.7% of travellers and almost 16 mln users. Cf. ADIF, 2009.

For the interoperability of the railway system, the concept of cross acceptance should be advanced. The European Railway Agency should become a truly European systems authority. By doing so, inconsistent national safety approaches could be eliminated as far as possible, thus facilitating and fostering cross-border rail traffic growth.

In terms of investment planning, TEN-T marks an important step. This should be further complemented by harmonised traffic-management as is foreseen in the rail freight regulation.

In urban transport, the European Union can support the process of modal shift and help local authorities by taking the following key measures:

- Financing of clean and energy-efficient urban transport: a portion of the EU budget could be reallocated to urban transport when revising the EU financial perspectives; resources from the EU emissions trading scheme could be used to finance urban transport. The proportion of (infrastructure and rolling stock) urban rail transport investments among structural and cohesion funds could be increased. A European legal framework for urban charging should be created and allow for revenues to be used to finance infrastructure.
- Standardisation: a dedicated urban rail European voluntary standardisation framework should be developed with the support of the European Commission issuing a mandate to CEN, CENELEC and ETSI for the development and adaptation of harmonised standards for use in the field of urban rail.
- Best practices: the European Union should create a platform of cities and mobility stakeholders, including the rail supply industry, in order to exchange best practices regarding urban mobility.
- Procurement: the European Union should develop a legal framework for green infrastructure procurement, where the environmental performance of the infrastructure and its operation should be assessed, before granting public funding.

## **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 the EU industry and transport operators to thrive in the international context? How can the Union better contribute to sustainable global governance?*

With a global market share of more than 50% of the worldwide production of rail equipment and services, the European rail industry has established itself as a worldwide leader and has a long history as an exporting industry.

In this respect, the opening of new opportunities for rail in several regions of the world - such as the American rail renaissance or the building of major rail networks in the Middle East or China - are viewed as key opportunities for UNIFE member companies.

The EU can play a role in advertising the environmental benefits of rail transport and in influencing third countries to opt for that mode to reduce their impact on climate change. For example, reaching an ambitious deal in December 2009 in Copenhagen will certainly push some countries to invest in rail, given the significant share of transport-related greenhouse gas emissions in many regions of the world. Here, the EU should promote European rail standards for their safety and competitiveness globally. In the same vein, the EU should seek to better promote rail transport connections with neighbouring countries. It should generally encourage rail as a transport means of choice in third countries. European mainline as well as urban rail transport are cases of best practice here. Also, specific policy initiatives (with for instance dedicated funding or the provision of experts' assistance for infrastructure projects) to incentivise the use of rail in third countries would help to reinforce rail as a sustainable transport solution globally.

Against this background of global market opening, the European rail industry increasingly meets competition from foreign suppliers on the European market. Whilst the European industry is fully prepared to face the competition and is in favour of liberalising of global trade, it would expect third countries to equally open their markets to European suppliers in return.

In the same idea, particular attention must be paid to Free Trade Agreements (FTAs) signed with third countries, as they may impact directly rail business. The EU should also seek to facilitate access to third countries' markets which are often protected by Non-Tariff barriers. So far, UNIFE finds that similar issues have sometimes been overlooked by the EU - a key provider of jobs and a strong contributor to economic growth, the European rail industry would like to have its concerns better taken into account.





## About UNIFE

UNIFE represents the European Rail Industry in Brussels since 1992. The Association gathers 66 of Europe's leading large and medium-sized rail supply companies active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. A further one thousand suppliers of railway equipment partake in UNIFE activities through 15 national rail industry associations. UNIFE members have an 80% market share in Europe and supply more than 50% of the worldwide production of rail equipment and services.

UNIFE represents its members' interests at the level of both European and international institutions. On the technical side, UNIFE works on the setting of interoperability standards and coordinates EU-funded research projects that aim at the technical harmonisation of railway systems. The association is one of the supporting bodies of the European Railway Agency.

***UNIFE. Competitive rail solutions for sustainable mobility.***

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