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On track for a sustainable future

EIM contribution to the debate on the Future of Transport



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Introduction¹

The association of European Rail Infrastructure Managers (EIM) would like the future of transport to be shaped on the basis of the following key points:

- The transport system must provide customers with **the best possible mobility choice**. This applies both to passenger and freight transport. Better **integration** of the different transport modes will improve the overall efficiency of the transport system.
- **Liberalisation** of the rail sector is crucial to improving the quality of services and choice for customers. Liberalisation will make the rail sector more efficient and will improve its ability to compete with other modes. **Independent and strong regulatory bodies** should monitor the market and ensure that new entrants are not discriminated against. The harmonisation of principles and procedures (i.e. track access, charging schemes) should be further promoted, as well as international cooperation and coordination of infrastructure managers, railway undertakings, member states and regulatory bodies.
- **Concrete and overall emission reduction targets** should be set for the transport sector as whole. These would provide a clear and measurable goal for transport policy. Policy measures should be assessed in the light of their contribution towards this goal. Increasing national and European **investment** in rail infrastructure is of primary importance. Investment should be designed to promote decarbonisation and should foster a shift to sustainable modes, in particular from road to rail for freight and from air to high speed rail for passenger transport - **with the objective of creating a high performance network that meets customers' needs**. The **internalisation of external costs** is the key to reducing emissions from transport and to tackling climate change. The "**polluter pays principle**" needs to apply to all modes of transport and would **level the playing field** between modes.
- Railway infrastructure managers intend to develop and implement **innovative and environmentally friendly transport technology**. For rail, this includes new **interoperable technologies, such as ERTMS**, which should be deployed along the EU's railway network.

What do we want the future of transport to achieve? We should continually ask ourselves this question as we tackle the challenges and trends that will face the transport sector in the years to come.

EIM would like the transport system of the future to be sustainable, safe and secure, easily accessible and customer-friendly. Our goal is to attain a level playing field between modes in addition to their integration. This will induce modal shift towards more environmentally-friendly modes – and consequently reduce emissions.

¹ At present Banverket does not support EIM's position

Transport accounts for 25% of all greenhouse gas emissions (GHG). Emissions from transport are growing while other sectors have managed to reduce emissions in recent years. The main challenge for transport will thus be to drastically and rapidly reduce emissions while maintaining high levels of service and its key role in the European economy. Clear and measurable emission reduction targets should set the primary goal for the sector and for transport policy in the coming years. All other policy measures and tools should be geared towards meeting these targets.

In future, transport needs to be multimodal, highly electrified, interoperable and responsive to the needs of passengers and freight shippers. As the Commission Communication on the Future of Transport states, European transport policy “has assisted social and economic cohesion and promoted the competitiveness of the European industry thereby contributing significantly to the Lisbon Agenda for Growth and Jobs”.² This should be maintained and further developed in the years to come.

In order to achieve this vision, the transport industry and political decision makers must:

1. focus on customers and integrate modes
2. fully liberalise railway transport
3. invest in sustainable modes and set the right prices
4. foster the role of technology and interoperability.

Focus on transport customers and integration of modes

The transport system must provide customers with **the best possible mobility choices** combining the need for sustainable solutions with efficiency and service. The **internalisation of external costs** should be the first step in order to trigger a behavioural change amongst EU citizens. Transport prices should enable users to identify which transport mode is best for society and the environment.

For **passengers**, this means that the EU should encourage the use of public transport, in particular rail transport. Seamless public transport options are vital. These include parking places for cars and bikes at train stations and well integrated timetables and ticketing options. In addition, integrated e-ticketing will improve access to public transport and contribute to a paperless society.

Greater involvement of the public sector should be properly regulated so as not to cause delays in realising a project and not to prevent growth in transport. **Urban planning** should consider transport not only as an opportunity, but also as a possible source of issues for citizens. In this regard, EIM would like to highlight that rail infrastructure managers are already implementing several measures to promote the use of “silent” trains and abate rail noise.³ Urban planning should therefore follow an integrated approach and take issues related to rail noise seriously, especially in sensitive areas (e.g. near hospitals and schools).

With the opening of the international rail passenger services market in 2010, the quality and choice of services and products should become more attractive and cost effective. The opening of the domestic passenger services market should also be promoted.

² COM(2009) 279/4

³ EIM brochure ‘On track to a greener rail network’, September 2008. http://www.eimrail.org/EIM_ENVI_Best_Practice_final.pdf.pdf pages 13-14

For **freight** transport, where markets have been fully liberalised since 2007, there are still some measures that can make rail freight more attractive, such as:

- Developing a broader network of market based rail freight corridors and putting into practice **a smart freight corridor regulation**. In this regard, the successful experience of the Rotterdam-Genoa rail freight corridor is an example of best practice in interoperability and coordinated deployment. Therefore, the freight corridors regulation should ideally encompass:
 - A procedure encouraging the creation of rail freight corridors from a business perspective
 - An efficient governance body for these corridors
 - The definition of flexible but harmonised priority rules for capacity reserves and traffic management
 - Long term and medium term coordination of investments by the infrastructure managers along a corridor
 - Availability of and connection to intermodal services, such as terminals and hubs
- Further developing the **interoperability** of the European railway system to foster cross-border transport.
- Promoting the use of **High Speed Lines for high value freight transport** during off-peak hours. This would result in a more efficient use of High Speed Lines and in a quicker and more reliable transport of goods by train.
- Fostering the use of the Marco Polo II programme to shift freight off the roads in order to improve the environmental performance of the freight transport system.

The aim for both, passenger and freight transport, should be to meet customers' needs through efficiency, quality, reliability and punctuality.

EIM supports a **better integration of the different modes of transport** as a way to improve the overall environmental and economic efficiency of the system to meet customers' requirements.

The better integration of transport modes should lead to the decarbonisation of the European transport system. Priority should be given to promoting the growth of more environmentally friendly modes, which will help to achieve the current EU GHG emission reduction targets⁴ as well as those agreed at and following the Copenhagen summit.

For example, the relationship between rail and road transport will be increasingly complementary in the future, with rail using its obvious strengths over long distances and road freight playing its critical role for regional feeders and distribution. Enhanced integration between rail and air through the connection of airports to high speed lines and between maritime transport and rail in the ports is also desirable.

EIM supports a pragmatic approach to Green Corridors that puts the co-modality concept into practice and makes transport efficient. Green Corridors should have the following characteristics:

- Sustainable logistics solutions with documented reduced environmental and climate impact, high security, high quality and efficiency;

⁴ As outlined by the 2008 EEA report "A time for a transport change"

- Integrated logistics concepts with optimal utilisation of the different modes of transport;
- Harmonised system of rules with openness for all actors;
- A concentration of national and international goods traffic on relatively long transport stretches;
- Effective and strategically placed transshipment points and adapted and supportive infrastructure;
- A platform for development and demonstration of innovative logistics solutions (information systems, collaboration models and technology).

Enhanced integration should also be promoted through the connection of airports to high speed lines. The integration of maritime transport and rail in the ports is also desirable and helps to reduce congestion.

The Port of Gothenburg (Sweden) is a good example of intermodal connection for freight transport. It has the most frequently operated goods tracks in Sweden. The electrified port railway provides environmentally sound transportation. 25 train shuttles connect the so-called RailPort Terminals with the most important logistics centres around Scandinavia. On top of its environmental benefits, such a system leads to increased competitiveness and efficiency. Despite the recession, in May 2009, 31280 Twenty-foot Equivalent Units (TEUs) passed through the rail terminal, which is 10% more than last year and an all-time best performance.

Liberalisation of railway transport

EIM supports the liberalisation of the rail sector. The main objective of liberalisation is to improve the quality of service, broadening the choice of customers and enhance the efficiency and competitiveness of rail in comparison to other modes of transport. Therefore full liberalisation has to be promoted, including in domestic passenger services.

For liberalisation to be effective in the future, the industry should produce sound and realistic business plans and coherent asset management strategies in order to improve the quality of the service. Moreover, non-discriminatory provision of access to track and to essential rail related services are required.

EIM supports fostering open access to **rail operators and remove the barriers to market opening**. New operators face barriers to entry and to operation mainly represented by unfair pricing, restricted or no access to services, lack of information and transparency. EIM believes that these barriers should be dealt with in the Recast of the First Railway Package as well as the implementation of the three existing railway packages (if need be via infringement procedures).

We highlight the importance of full separation of responsibilities of Infrastructure Managers and Railway Undertakings and strong and independent regulation in all member states. Thus, **Regulatory Bodies should be independent** from Railway Undertakings, Infrastructure Managers and Ministries. They should have sufficient resources and competent staff in order to play a stronger role. Regulators should monitor the market and ensure non-discrimination towards new entrant operators, not only in relation to infrastructure access, path allocation and charging, but also with regard to rail

related services. Regulatory Bodies should also co-operate closely with competition authorities to take advantage of their long experience of dealing with competition issues.

The harmonisation of principles and procedures (i.e. track access, charging scheme) and international cooperation and coordination of infrastructure managers, railway undertakings, member states and regulatory bodies should be further promoted.

EIM also supports the **increase of information in network statements**. According to EU law, the contents of network statements cover only infrastructure, charging and capacity allocation. Directive 2001/14 does not require the inclusion of information on rail related services in network statements. This lack of information can prevent transparency in the market. EIM therefore recommends that network statements be more comprehensive and include information on those rail related services provided by the Infrastructure Manager, with details on the kind of service, availability and pricing. The fact that some infrastructure managers form an integral part of national railway undertakings threatens also the Europe-wide non-discriminatory access to rail related services and facilities. In the case of heavily used services particularly, there are concerns regarding the preference shown by service providers towards the railway undertakings operated by themselves. Transparency and separation of functions are therefore vital to ensure the equal treatment of all railway undertakings as regards access to the rail infrastructure and to service facilities in order to optimize their use at a European level.⁵

Investment in sustainable modes and importance of prices

Alongside the environmental crisis, the world is struggling with the effects of the economic downturn. As with the threat of climate change, the economic crisis requires urgent action in the transport sector through **investment in sustainable projects**. This will not only stimulate economic growth but respond to some urgent needs of transport in Europe.

Railways should launch innovative, customer focussed initiatives that enable the EU to make the case for additional government investment in rail transport. Where necessary, the EU should provide financial support.

Further development of the **European High Speed rail network** (in particular in the framework of the TEN-T Policy) should be a priority, as reliable and rapid rail connections induce modal shift from air and road to rail. High speed lines offer the best alternative to short haul flights as the Madrid-Barcelona line or the Paris-Brussels-Cologne/Amsterdam lines demonstrate. This also reduces energy consumption and CO2 emissions from transport.

Investment must also be better coordinated. For example, **TEN-T funding** should continue to foster market-based rail projects and EU regional aid should become more focussed on environmentally friendly transport modes as well as enhancing the EU's territorial cohesion. Another important point is the reinforcement of the participation of the private sector in the financing of large investments, via public-private partnership (**PPPs**).

5 Annexes to the Communication on the implementation of the railway infrastructure package directives ('First Railway Package') (COM(2006) 189 final), page 40

Multi Annual Contracts and Agreements (MACs), have been encouraged by the EU. Multi Annual Contracts and Agreements can increase the financial stability of infrastructure managers. Planning helps infrastructure managers to achieve efficiency in the long run. MACs should become binding to ensure the adequate maintenance of rail infrastructure in all member states, so as to achieve a high performing network that meets customers' needs.

Efficient movement of goods within Europe and across its borders is critical to achieving our vision for sustainable freight transport. Such efficiency is threatened by capacity bottlenecks in rail infrastructure. EIM appreciates the need to make better use of the existing infrastructure by **increasing capacity and reducing bottlenecks**, rather than building new infrastructure, as pointed out in the communication. However, in the long term the expected need for increased capacity will require the construction of new infrastructure. Furthermore, the challenge of capacity growth should be a key factor when shaping the future EU transport policy.

On the other hand, not only should 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, a problem in many member states.

EIM members have already been taking innovative actions on reducing bottlenecks on the European rail network. For example, Infrabel has contributed to improving the situation at the **Aachen-Monzen** bottleneck: the electrification of the missing section of the line and the use of the same train numbering on the whole section are the first steps to a final solution.

EIM welcomes the intention of the Commission to set price signals to reflect the internal and external costs and to change the behaviour of EU citizens. Currently all citizens contribute to the financing of transport infrastructure since public funds are usually their main source of financing. However, the prices paid for transport should correctly reflect the costs to society - **applying the user and polluter pays principles**. Revenues should be invested in the infrastructure of sustainable modes.

The **“polluter pays principle”** should therefore apply to all modes of transport so as to remove current inequalities. At present, prices for more polluting modes unfortunately do not reflect the real costs to society. The external costs of transport, such as air pollution, noise, congestion, accidents and CO₂ emissions, are largely ignored.

These costs urgently need to be internalised. This would **level the playing field** between different modes of transport as transparent and effective pricing allows for more economically viable choices.

In order to implement the ‘polluter-pays’ principle in transport, EIM suggests the urgent adoption of the revised Eurovignette Directive. A quick adoption of the Directive is necessary to allow member states to internalise the external costs of heavy goods vehicles and charge road transport for its real costs, as they already allowed doing for private cars.

EIM believes that the following key points should be the basis for an effective implementation of the Eurovignette Directive:

- The revised Eurovignette Directive should allow the internalisation of external costs in road freight transport, which is explicitly prohibited in the current Directive, whereas Directive 2001/14 allows it for rail.
- Specific climate targets or market-based instruments to achieve concrete reductions in GHG emissions should be defined for road transport.
- The scope of the Directive should include the external costs of noise, pollution, congestion, CO2 emissions and accidents.
- In order to offset the negative externalities, revenues should be invested to improve the offer of sustainable transport.

Rail infrastructure managers are keen to make optimal use of their financial resources in order to maintain and develop the European railway network. In the current financial climate, the best possible use of available funds is required.

The Commission should therefore consider the use of revenues from the internalisation of external costs as a source of project funding. The Eurovignette Directive proposal (Charging of Heavy Goods Vehicles) as amended by the European Parliament on 11 March 2009, and in particular its new article 9 states: *“As from 2011, at least 15% of the revenues generated by external cost and infrastructure charge in each Member States shall be dedicated to the financial support on TEN-T projects to increase transport sustainability. This percentage shall gradually increase over the years.”*⁶

Revenues should be earmarked to finance projects aimed at making the EU's transport system more sustainable. In addition, funds should be further allocated to the implementation of the Trans-European Transport Network (including interoperability and ERTMS).

EIM recommends the "IMPACT handbook" published by the Commission in January 2008 as a tool for the internalisation of external costs. It is a consistent, comprehensive and solid model for calculating external costs for all modes of transport, finally consolidating all the scientific knowledge available on this complex subject.⁷

To achieve the goal of creating a level playing field between modes, setting adequate price signals and reducing CO₂ emissions, the unfair tax treatment (e.g. VAT on international passenger tickets) of rail, which perversely favours more polluting modes, should cease.

All transport modes should be included in the European Emission Trading Scheme (ETS) and a separate ETS might even be established for the transport sector. In this regard, the rail sector is unique, as it is **the only transport mode already effectively included within the ETS** due to it being a heavy user of electricity (electricity generation is part of the ETS). In EU 27, 51.6% of the railway lines are electrified, which accounts for about 80% of the traffic.

The EU can play a role in advertising the environmental benefits of rail transport and in influencing non-EU countries to opt for that mode to reduce their impact on climate change. For example, reaching an ambitious deal in Copenhagen would have pushed some countries to invest in rail, given the significant share of transport-related greenhouse gas emissions in many regions of the world.

⁶ <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P6-TA-2009-0113>

⁷ Transport sector position paper on the Eurovignette Directive _ http://www.eimrail.org/JointPositionpaperonEurovignette090119_VP.pdf

The role of technology

The overall objective of the **development of new technologies** is to improve transport services **for the benefit of customers and to render transport more sustainable**. For example, while energy consumption of private cars has decreased by 13% since 1995, that of passenger trains has gone down by 21%.⁸ The rail industry continuously works on improving this energy balance even further.

Research and innovation in transport should take into account the political priority of meeting the challenge of climate change. Good examples are the EU funded CleanER-D projects that aims to improve emissions from diesel traction and the Railenergy project that looks into the overall energy consumption of the railway system.

Other benefits are introduced by information technologies such as wireless internet on trains or for freight where IT applications can facilitate transport. EIM supports the Freightvision project⁹ statement that e-freight will help “to promote co-modality by providing dynamic multi-modal door-to-door travel information” (...) “making logistic processes more efficient” and “associating the physical flow of goods with a paperless trail built by ICT”. However, “a number of technical obstacles need to be overcome.”

Technology and interoperability of European railway systems go hand in hand and are key to market opening. A prime example of this is **ERTMS** (European Rail Traffic Management System). This state of the art signalling system allows for seamless cross-border traffic by replacing more than 20 different train control systems in Europe. Already a success worldwide, ERTMS now needs to be deployed across Europe as quickly as possible and in a coordinated manner, along the lines of the ERTMS Deployment Plan adopted by the European Commission. If this is achieved, cross-border rail traffic in Europe will be facilitated – which will considerably increase the competitiveness of the rail sector vis-à-vis road transport.

The implementation of the Interoperability Directive 57/2008/EC, along with the development of the Technical Specifications for Interoperability (TSIs), will improve the coordination/operation process between all the member states further. It thus fosters rail market growth.

The EU should promote the development of innovative and environmentally friendly transport solutions, such as **tram-trains**. In order to achieve these objectives, complicated requirements for tram train products should be avoided, as they will hinder the development of urban public transport and seamless mobility. At the same time, adequate level of safety should always be ensured, based on sound risk assessment principles.

Introducing new technology takes a long time in the rail sector because of the long lifetime of the assets. State aid rules for new technologies should not lead to distortion of competition.

New technologies can enhance multi-modality and help make transport sustainable, efficient and safe.

⁸ Institut für Energie- und Umweltforschung GmbH (IFEU), Heidelberg 2008. <http://www.ifeu.de/>

⁹ Management Summary III. Assessment of Measures & Action Scenario. Prepared for the 3rd Freightvision Forum 19th and 20th October 2009, Brussels. Page 35

EIM believes that a deployment of interoperable **Intelligent Transport Systems (ITS)** across *all transport modes* can help to reduce CO2 emissions, congestion and energy consumption as well as increase safety. Currently there is no coherent European framework for connecting transport modes using information and communication technologies. EIM would like to stress that ITS should not only be applied to road but also coordinated across all transport modes, in order to ensure a seamless traffic flow for both passengers and freight. Freight should be identifiable and locatable regardless of the transport mode used. This requires standard information flows and traffic interfaces between the various transport modes.

The first step in putting such an integrated approach into practice should be the setting up of an ad-hoc EU inter-modal platform, to which the various transport modes should provide information. In order to facilitate the electronic exchange of information between modes, standardised information should be compatible with railway Technical Specification for Interoperability for Telematic Applications for Freight and Passengers (TSI TAF and TAP), which are mandatory at European level. A coordinated approach to RFID and EGNOS/Galileo technologies is required to avoid incompatibilities amongst various transport modes.

The EU can contribute to an accelerated deployment of sustainable technological solutions resulting from EU-funded R&D projects. Financial support for a specific upgrading/replacement of current rail technologies is a logical follow-up to current research and transport policy goals.

Energy efficiency, reduction of GHG emissions, noise abatement and reduction of the overall carbon footprint should be primary objectives of EU research programmes, such as the 7th Framework Programme.

Transport is in fact the only sector where greenhouse gas emissions continue to rise (by 26% in the EU-15 between 1990 and 2005), while in all other sectors they fell. Therefore, financial instruments supporting environmental and nature conservation projects, such as the LIFE + Programme supporting environmental and nature conservation projects should become more attractive and targeted for the transport sector.

Additional comments

Coordinated action

A modern urban transport system requires clear, accurate, and common cross modal systems to provide travellers with information. While there is some good practice in many major European cities, large provincial towns are not so well equipped. The European Commission should support funding of research and development in cross modal information technologies for travellers.

Until the full internalisation of external costs is achieved, the EC should promote the use of alternative measures other than direct pricing schemes. For instance, compensation schemes could be introduced for sustainable transport modes. The Commission should however require member states to adapt these schemes to their national situation¹⁰. Better interchanges and border formalities also need to be put in place in order for rail transport to improve its competitiveness compared to other transport modes.

¹⁰ EIM response to the Public Consultation on the Green Paper: "Towards a new culture for urban mobility" March 2008

(<http://www.eimrail.org/pdf/otherpapers/EIM%20replies%20to%20TEN-T%20Questionnaire%20Apr%2009.pdf>)

As another concrete action, the EU should not provide funds for road projects where a viable rail alternative already exists.

EIM believes in an Action Plan on Urban Mobility which encourages the optimisation of various modes of transport by improving urban travel plans and incentivising sustainable mobility in urban areas. Therefore, EIM supports the European Parliament's resolution on an Action Plan on Urban Mobility. The report also calls for accelerating European research and innovation in the field of urban mobility with a European internet portal and forum on urban mobility.

EIM acknowledges that urban areas are inter-modal and interconnection poles for TEN-T Networks, which should favour sustainable mobility and competitiveness of European urban networks. In addition, EIM welcomes the 'urban travel systems approach' linking soft modes of transport (cycling, walking, etc) with diversified and complementary transport modes.

Even though urban transport is subject to the subsidiarity principle, local authorities cannot meet its challenges without European coordination. The Commission should publish its Action Plan on Urban Mobility as planned and coordinate all its activities in the urban mobility field.

The external dimension

Some actions can contribute to fostering relations with our neighbouring countries:

- Exchange of best practice
- Coordination regarding cross border solutions
- Cooperation on Climate Change issues
- Technical harmonisation
- Coordination on infrastructure maintenance work and investment.
- Establishment of communication language in international rail transport.

Conclusions

- **Transport customers** have to be the reference point when developing the transport system of the future. Both passengers and freight shippers **should guide the system to the best possible mobility choice**. A key element to improve the overall efficiency of the system is the **integration of modes**.
- **Liberalisation** of the rail sector is crucial to achieve this objective and **independent and strong Regulatory Bodies** have to ensure that there is not discrimination against new entrants.
- To meet customers' needs and to promote the **decarbonisation of the transport system**, more national and European **investment in rail** infrastructure is required. In addition, the **internalisation of the external costs** and the application of the "polluter pays principle" will help to level the playing field between modes.
- **Innovative and environmentally friendly transport technology** solutions must be developed and implemented.