

ALSTOM contribution  
to the consultation on

The Future of Transport

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

In 2001, the Commission issued a White Paper “European Transport Policy for 2010: time to decide”, which sets an agenda for transport policy throughout 2010. This was followed, in 2006, by a mid-term review. On 17 June 2009, the European Commission adopted a communication entitled "A sustainable future for transport: Towards an integrated, technology-led and user-friendly system", to stimulate the debate and further implies stakeholders on shaping transport's future.

Alstom EU Delegation welcomes the initiative of the Commission to launch a consultation on the Future of Transport, and is pleased to give its contribution.

In the context of global warming and the important contribution of the transport sector to greenhouse gas emissions, the initiative of the European Commission to define a new strategy for the transport sector is of utmost importance. Of course it is necessary to take stock of the actions undertaken, progress achieved and improvements needed since 2001. However, it is crucial to define the future of transport according to these drivers and shift to a low carbon transport policy.

## 1. Infrastructures and rolling stock

*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?*

The infrastructure development is closely related to the funding issue the EU will be faced with in the future decades. Investment choice will need to be made, and at the same time, new investment in rail will be needed to answer to the growing demand and to better connect Member States together. In addition, modernising and retrofitting infrastructure and rolling stock will answer a twofold issue: the ageing fleet and the negative impact on the environment. An increase in EU and Member States financial resources for investments would be required to achieve these objectives. Alstom therefore calls upon the European Commission to consider investments in new infrastructures and not to be limited to maintenance or upgrading.

With the upcoming lack of financing resources, investment orientation could be arbitrated under the use of criteria, such as the value added in the infrastructure investment to the EU economy. These criteria would be:

- Green house gases / CO<sub>2</sub>
- Travel time for passengers
- Reliability and costs for freight
- Infrastructure capacity utilisation
- Noise disturbance and land footprint
- Social costs related to transport accidents and illnesses (result of pollution)

As regards investments in particular, there are three priorities to consider:

1. Until now, the European Union's investments for rolling stock and infrastructures concerned the Trans-European Transport Network (TEN-T) and Member States through the Regional policy. One objective should be first the rapid completion of the TEN-T through public money or Public-Private Partnership. There is indeed a crucial need of resources and the budget allocated so far has been insufficient.
2. Future EU investments in rail transport also will have to target new transport modes, which will be able to answer to the future challenges to be faced by the EU, especially growing mobility demand. Very High Speed (VHS) has the ability to answer this challenge, to connect and bring together EU Member States and finally compete with other modes of transport such as aviation or road, while offering a more environment friendly alternative. Highly attractive, VHS is nevertheless very costly and has mainly been developed in Western Europe for the moment. Alstom believes that EU rail policy should consider as a priority the development of VHS and support, particularly to connect Western Member States and new Member States, its use within the EU.
3. Increasing urban population and low carbon cities will also imply to massively invest in urban transport, from bikes to intercity trains, to give European citizens as much

flexibility as possible. Alstom would first welcome the European Commission to publish its urban action plan on mobility and launch a renewed debate on the role of the EU in the urban transport sector. Alstom calls the EU to become more active in this field and propose financing solutions for sustainable cities (tolls funding clean and energy efficient public transport, introducing a stronger framework for green procurement, combinations of sustainable modes of transport: bike/ walk/public transport etc.)

Concerning the integration of modal networks, Alstom recommends systematic promotion of an inter-modal nod strategy, through:

- The development of efficient inter-modal platform (for freight and passengers)
- New train stations systematically connected to other modes, e.g. car park, tram line, regional-Very High Speed trains, etc
- Logistics business to be developed at freight nod
- Relief of bottlenecks in harbours to ease the connections with land networks
- Concentrate activities in or around nodes to reduce transportation distances for passengers
- Develop services to passengers at nodes: ability to book multi-modal journey, ease of transfers, information readily available on connections.

## **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?*

The Future of Transport can not be handled without addressing the question of a fair level playing field between modes of transport and the application of the "polluter-pays principle". Transport is still a sector, for which greenhouse gas emissions are still growing, and undermine the overall EU action to fight against climate change. According to the International Energy Agency, the transport sector is responsible for almost 60% of oil consumption in OECD countries and drives future growth in OECD oil demand. Developing a sustainable transport system should therefore be the key priority of the European Commission for the next decade.

Though rail transport is considered as less polluting, it is being taxed more than the other means of transport. Rail transportation offers significant benefits over other modes of transport when it comes to CO<sub>2</sub> emission. In the case of VHS for instance, CO<sub>2</sub> emissions are limited to 2 to 15 g CO<sub>2</sub> per passenger/km depending on the fuel used to produce the electricity. By comparison, the corresponding emissions for air and road transportation

amount to at least 10 times and 6 times those of rail. Significant gains are also realized for urban, sub-urban and regional trains.

This situation does not encourage the transport sector to be less polluting nor to promote a shift in customers' behaviours. New pricing and funding methods should be defined to internalise the costs of transport and truly reflect positive and negatives externalities. It will then drive consumer's behaviours and infrastructures investments.

Unife, the European Rail Industry Association, produced the following table, which shows the different taxes and charges for each mode of transport.

	Railway transport	Road Transport	Air Transport	Maritime and Inland waterways transport
VAT on International Passenger Tickets	YES	YES	NO	YES
Energy and Fuel Tax	YES *	YES	NO ** (De jure total exemption)	NO (De jure total exemption)
Emissions trading scheme	YES indirectly***	NO	NO****	NO
Infrastructure charges	YES	Optional	Only for airports	Only for ports

Source: UNIFE 2009

\* Energy and Fuel Tax on electricity and diesel traction with reductions or exemptions in certain Member States

\*\* Optional reduced tax for domestic flights (Directive 2003/96/EC restructuring the Community framework for the taxation of energy products and electricity)

\*\*\* Railways are indirectly touched by the EU ETS, as they are big consumers of electricity, whose production is included in the EU ETS

\*\*\*\* From 2013, a step-by-step approach to include air transport in the revised EU-ETS is foreseen

Two complementary parameters have to be taken into account:

- The increasing difficulties of financing capacities from public entities, from both the EU and the Member States. New and alternative ways of rail infrastructure financing will have to be found.
- Need to tackle the transport negative impact on the environment

We then believe that the most accurate solution would be the internalisation of the external costs of all modes of transport. It is now necessary to go beyond a tax such as Eurovignette,

which, even revised, does not include CO2 emissions and has a very limited scope. Alstom believes that the scope of externalities should be comprehensive and include:

- Greenhouse gas emissions / CO2
- Noise disturbance and land footprint
- Social costs related to transport accidents and illnesses (result of pollution)
- Congestion

Alstom calls the European Commission to issue a methodology that would allow the EU to design a new and comprehensive climate contribution for the transport sector. This solution seems to be more appropriate: an Emission Trading Scheme (ETS) would create distortions as electricity production for the rail sector is already covered by ETS. This climate contribution would generate revenue, which could be earmark in greener transport or R&D.

Additional financing possibilities should also be considered:

- *Structural Funds*

Funds from the European Regional Policy greatly contribute to the transport policy by funding transport projects. We believe that the Regional and Transport policy should be better linked. There are also no requirements of modes of transport balance in the use of Regional funds. Attention should be paid at the promotion of greening regional policy and encouraging modal shift to environmental friendly modes of transport. New Member States tend to develop their road infrastructure and neglect railways. Alstom therefore welcome the earmarking on regional funds, which should be further encouraged.

In addition, as many funds are underspent in some countries, the EU should aim at facilitating the expenses by putting down the EU participation threshold or extend the period during which money can be used. As funding for transport projects is missing, the spending of the money available should be facilitated. In this time of economic downturn, Member States do not have enough resources to invest in co-funded projects, which make projects unable to be completed. If this solution is unlikely to be implemented for 2007-2013, it should be considered for the next 2014-2020 financial perspectives.

Another element to take into account is the size of co-funded projects: in some countries, as Central European Member States, projects tend to be segmented in many lots. As a result it increases the red tape, execution time and the overall costs. Turnkey projects or a less fragmented approach could be added as a criterion to the structural funds to promote better and efficient use of the EU funding.

- *Public Private Partnership*

As public money will be missing, other means of financing the transport sector will be needed. Alstom considers Public Private Partnership (PPP) as a solution to the future lack of public funding provided it respects some principles:

- Need of a coherent environment for competition: the system of the preferred bidder is therefore recommended, which selection should occur as early as possible for a fast development of the project

- Combine PPP and EU regional funding: companies should be able to “co-fund” projects on structural funds
- A reasonable amount of risks kept by the public entity to provide viability to projects
- Possibility to create business outside basic scope of the infrastructure (commercial centres, real estate, such as Honk Kong metro model).

### 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?*

In the rail sector, the single market has not been achieved yet: national standards for rolling stock or infrastructures, safety or homologation are still barriers to the free movements of persons and goods within the European Union.

As regards technology, the key objectives should be interoperability and standardisation. Alstom is pleased to note that the European Commission considers the definition of norms as a strategic instrument of the European transport policy. There are still the major remaining hurdles to cross borders since each Member States tends to keep its own national system. Alstom is fully aware that interoperability and the use of common standards is costly and require additional financing means. However, Alstom and the European rail industry do master the necessary technology, which would allow trains to cross Europe without any technological barriers, and believes that the use of new technical possibilities remains limited compared to its potential. Alstom therefore recommends to:

- **Extend interoperability principles and apply them to all railway lines**

This means to develop cross-acceptance within EU for homologation. It also implies to simplify border-crossing procedures to meet truck operating conditions, so that there are no necessary stops while crossing borders in the EU

- **Enhance ERTMS development through funding and binding objectives**

The increase of the speed of deployment will reduce long-term costs (less cost for maintenance of dual system and obsolescence management)

- **Set standards and norms that will be compulsory for any new order of infrastructure and rolling stock.**

This measure will allow the EU to move to a single rail transport market: this decision, the definition of the standards and the timeline should be defined with rail stakeholders, Member States and the European Commission.

- **Creation a regulatory body at EU level for infrastructure and equipment**

This body could be in charge of the coordination of the use of standards and norms within the EU: it will guarantee the end of additional norms at the national level. Such a body should promote EU standards worldwide, in order to strengthen the position of the European industry in a global environment.

- **Support research & development**

The main objective will be to develop low carbon, low cost and safer technologies (energy efficiency, automatic driving, etc)

- **Particular focus on energy efficient technologies**

The use of advanced technologies and materials provide for further reduction in energy consumption, and would be a first step to making transport more sustainable. For instance, Alstom's latest generation of very high speed train, the AGV, uses 15% less energy than the competition, thanks to the permanent magnet motor technology, aerodynamics and materials. Another example is energy regeneration, where electricity is sent back on the line during breaking. In the case of very high speed, the resulting energy saving amounts to 6 to 10%, as this energy would have been transformed in heat otherwise. Whereas Alstom offers this regeneration technology for mainline systems (e.g. very high speed), and will soon make it available for urban systems as well.

- **Address the issue of safety certification**

Each national authority is in charge of certification, which is costly and lengthy. Alstom welcomes the initiative of the European Commission of organising a conference of the European rail safety on 8 September 2009 and its outcome: we strongly support the extension of the European Railway Agency's competences in this area. We are very much in favour of the promotion of cross-acceptances in the EU, which would allow for a decrease in project cost and an increase in project deployment speed.



## 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?*

With the three railways packages, the European Union has made important steps for the railway sector. One can assess that since 2001 liberalisation had a positive impact on rail transport, as it has favoured its growth in some Member States and its market share. Competition is actually fundamental to revitalize rail sector. Though the implementation of the railways packages is not completed Alstom calls the European Commission to pursue its work and **achieve further market opening**: national passenger transport has to be the next milestone.

## 5. 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?*

The European Union should ensure that European rail industry maintain its global leadership, in terms of technological advance and sheer size, for the benefit of the European economy. A leading industry can continue to offer value-adding solutions to European operators. Other ways to strengthen European leadership could also be:

- To finance a shared test centre to support trans-European validation and homologation
- Promote European standards worldwide, providing support in the setting of international standard and in financing project where rail systems are developing
- As mentioned above, support the development of an integrated Very High Speed Train network throughout Europe as it brings value the European economy

Rail transportation is particularly concerned with public procurement rules and its respect. The European Commission should ensure that EU market remains open as long as domestic markets of non-EU players are open to European players, e.g. Japan, China etc. Rail industry, thus jobs, research and development centres and innovation can be threatened by the lack

of access to foreign markets while foreign suppliers from these countries have a free access to the EU market.

For instance, the EU-Japan trade relations in the field of rail transport are marked by a complete lack of reciprocity. Data are striking: while the three world leading companies (Alstom + Bombardier + Siemens) collectively hold a 60% world market share, they only get 0,3% of the Japanese market. As a result, several major rail contracts have been awarded to Japanese suppliers in Europe, whilst EU companies do not have similar opportunities in Japan. At the beginning of 2009, the Agility Trains consortium of Hitachi, John Laing and Barclays has been selected as preferred bidder for the supply of 1,400 vehicles as part of the government-led Intercity Express Programme, the largest procurement since British Rail was privatised. The total value of the contract is estimated at €8.5 Billion (£7.5 Billion). This asymmetry of market access is unfair and should not be tolerated.