Opinion of the European Economic and Social Committee on 'The prospects for sustainable employment in rail, rolling stock and infrastructure: how industrial change will influence the European employment and skills base' (own-initiative opinion)

(2012/C 24/05)

Rapporteur: **Mr CURTIS**

Co-rapporteur: **Ms HRUŠECKÁ**

On 20 January 2011, the European Economic and Social Committee, acting under Article 29(2) of its Rules of Procedure, decided to draw up an own-initiative opinion on

The prospects for sustainable employment in rail, rolling stock and infrastructure: how industrial change will influence the European employment and skills base (own-initiative opinion).

The Consultative Commission on Industrial Change, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 27 September 2011. The rapporteur was Mr CURTIS and the co-rapporteur was Ms HRUŠECKÁ.

At its 475th plenary session, held on 26 and 27 October 2011 (meeting of 27 October), the European Economic and Social Committee adopted the following opinion by 104 votes in favour with 1 abstention.

1. **Conclusions and recommendations**

1.1 The European rail equipment industry has proven to be capable of delivering state of the art solutions for environmental- and user friendly means of transport that meet the high demands of mobility and CO_2 reduction. A declining home market and limited access to other markets will undermine the leading position of the European industry. The ambitious EU transport agenda cannot be fulfilled without a strong European based industry. EESC recommends the following actions to consolidate and strengthen the strategic position of this industry in Europe.

1.2 A full-scale inventory of bottlenecks in the main national and transnational connections is needed.

1.3 A comparison of operational urban systems in European metropolitan areas and state-of-the-art solutions, on the basis of energy and environmental efficiency, should set a benchmark.

1.4 EU producers should have the same access to non EU markets as non-EU producers to the EU market, on a reciprocal basis.

1.5 A comprehensive industry policy is needed that contains substantial investment in conventional systems. The result of non-investment would mean further losses of jobs and skills in this strategic sector. This would in turn lead to the sector being dangerously weakened.

1.6 Although the European Rail Agency (ERA) issued Technical Specifications for Interoperability (TSI) an integrated rail network is still far from a reality, entailing obvious obstacles to pan-European rail transport. The EESC is of the opinion that, given the current state of affairs, full use must be made of the Europe 2020 Strategy that, among others, envisages a firm framework for the coordination between the Commission and the Member States in matters that are not directly covered by EU-regulations or legislation, but are of significant importance for the Single market.

1.7 A significant expansion of transnational cooperation, also involving universities, research centres, and properly-trained young professionals, is vital in order to standardise the development, design and production of newly-built trains that can cross different rail and signal systems. This in itself would give a boost to European industry. A variety of measures to promote and foster the use of rail transport, in order to reduce congestion and carbon emissions, should be encouraged. In order to trigger behavioural change it is at the same time necessary to improve the capacities, attractiveness and user-friendliness of rail transport in an environment of fair competition, also with other modes of transport.

1.8 The EU and national governments should encourage and support innovation as a factor for maintaining and increasing European competitiveness, as proposed in the EU 2020 programme. In this area, the priority approaches can be identified as simplifying technology, ensuring the quality of the services provided (in terms of safety, comfort, traffic regularity and capacity, etc.) lowering energy consumption and reducing the carbon footprint.

1.9 Technological development goes hand in hand with the development of skills and knowledge within the sector and with the ability to attract young engineers (war for talents). Demands of the potential users and other stakeholders are drivers of the technological development. Therefore further development of social partnership and stakeholder involvement is a necessity.

1.10 In the medium and long term, the establishment of a European sectoral skills council should be considered to identify the skills and jobs that will be necessary in this sector. It is therefore of importance that up-to-date research and accurate data on employment in the rail sector is done in order to define the future needs.

1.11 Without a comprehensive industry policy and proper funding, fragmentation will continue and the European market will lose its leading position. Only a growing home market will allow the industry to maintain the present employment levels in Europe.

2. **Introduction**

2.1 Passenger and freight rail transport is a key factor in a modern economy; it serves the general public's interest and has a strategic importance for policy makers in terms of increasing mobility and logistic streams while reducing environmental consequences. It supplies energy-efficient mobility with the lowest CO_2 emissions and is one of the answers to congested highways and urban areas. Medium distance connections could be an alternative for air transportation, whilst short distance and local connections could reduce car traffic.

2.2 An efficient network is essential to an environmental friendly and mobile European community and for further integration of the European community as a whole and new Member States in particular. The present networks are not ready neither in capacity nor in quality, to attract a greater market share for rail transport.

2.3 The constant increase in fuel prices and oil dependency, greater concern for the environment and the fight against CO_2 emissions will all affect the way in which different transport modes are used. Rail transport must consequently be upgraded and new, dedicated infrastructure put in place. The worldwide market is dominated by China, which is investing heavily in extending and upgrading its inter- and intra-urban rail network. Other emerging countries, such as India, Russia, Brazil and Saudi Arabia, amongst others, are also implementing or planning to implement large-scale projects. Growth outside and decline in the European market and the lack of reciprocity in the global market, will eventually undermine Europe's leading position.

2.4 The urban public transport market shows great potential for growth. Throughout the world today, there are 300 major agglomerations of more than one million inhabitants that do not have an urban guided transport system (metro or tram).

2.5 Mega high speed and conventional rail projects are foreseen in China, USA and other parts of the world. However the European industry needs level playing field and reciprocal market access to be able to compete.

2.6 An efficient rail infrastructure with modern facilities and equipment is essential to make changes in consumer behaviour, environmental demands and labour market mobility successful. A well-functioning system of spatial planning, including an appropriate involvement of citizens in the planning and decision-making processes is a prerequisite for achieving this. Due to the complexity and investment intensity of systems, the time to market can span several decades. Choices we make today will determine transport in 2050.

2.7 Competition from Asia, is already taking hold in Europe, whilst non EU markets are still protected by regulatory and legislative barriers. In order to avoid these barriers, European producers 'buy' market share with technology transfer, creating an industrial base in the receiving country which eventually will undermine the European employment base.

2.8 The growing power of this competition from outside the EU, is likely to be felt most in five to ten years' time, for example, when the Chinese market itself reaches maturity. This will have a direct effect on job prospects in Europe's railway sector.

2.9 In Europe, EUR 4.3 bn was made available for rail transport through the TEN-T 2007-2013 programmes. Additional funding through the European Cohesion Fund is mostly spend on road and not exhaustively used. The co-financing requirements seem to be an inhibiting factor. Special attention should be given to the situation in new Member States. While their rail systems are in coverage, capacity and technical state the least developed in the EU, the allocation of funds is relatively low. Out of the relatively few foreseen projects most of them are still in a study or pilot phase.

2.10 National and European funding on road transport, grants and support measures for the car industry, favourable tax facilities for air traffic are in contrast to how rail is treated. The fact that rail is taxed on its energy consumption and tickets revenues make it clear that rail is in many ways the last in line. In spite of its sustainability in social and environmental terms, the competitiveness of rail versus other transport modes is negatively affected by unfair taxation.

2.11 The introduction of Long Combination Vehicles (diesel trucks, often referred to with the misleading word 'Eco-Combi') and emerging long distance bus transport as a result of deregulation in various European countries is further undermining the competiveness of rail-transport.

2.12 The demand for 'made in Europe' rolling stock and rail infrastructure is clearly negatively affected by this unfair competition between the different modes of transport and the global trade barriers.

2.13 The European railway equipment sector is competitive industry and represents a considerable share in terms of employment. Although reliable statistics are missing, at least 113 000 employees are directly employed in the production of infrastructure and trains. The total employment in the sector in Europe is estimated at 300 000 employees. The EESC welcomes the initiative of the Commission to make a sector overview and competitiveness survey of the railway supply industry that will give us more insight in the industry.

2.14 Many countries are planning to renew or upgrade infrastructure, develop new trains, suburban and regional, upgrade and or extend metro lines and rolling stock, but the financial crisis jeopardised many plans and reduced the expected volume of investments. Postponing and downsizing projects are the order of the day.

2.15 Instead of renewing and investing in new technologies many operators of conventional networks are choosing to refit old fleets. Together with a slowdown of electrification plans (48 % of the 230 000 km of European railways is not electrified), technological and environmental development then slows down and might even come to a standstill.

2.16 An emerging railway market in other parts of the world will accelerate the globalisation process and might affect the technological base and long-term employment in Europe. Asia has already overtaken Western Europe as the largest market for rail equipment, a development not previously expected before 2015/16. China assigned approximately EUR 60 billion to the extension and improvement of its rail network in 2009 alone [1], and plans to invest 300 billion in the coming decade. The projection of the Trans-American Passenger Network foresees 50 billion of public spending between present and 2050.

2.17 The European Commission has been very active and published the 2007 Green Paper on Urban Mobility [2]. In 2008 the Commission informed in a handbook the estimated external costs in the transport sector [3]. In 2009, the Green Paper entitled *TEN-T: A policy review – Towards a better integrated trans-European transport network at the service of the common transport policy* [4] as well as the *Action Plan on Urban Mobility* [5], proposed new tools such as studies, databases and information material. In 2011 the Commission finally published the White Paper *Roadmap to a single European Transport area* [6] which estimates at more than EUR 3 trillion the cost for necessary infrastructural investments in the next 20 years with a key role for rail. The EESC is of the view that rail is the lowest emission transport mode and welcomes the very ambitious visions of this White Paper and would like to see policies developed to implement this.

3. **General comments**

3.1 The delaying effect of the financial crisis has increased the pressure on European rail systems. Many European countries, and particularly countries that have been hit by the financial and economic crisis, are unable to realise the renewal of their railway systems. *Ambitious mega-projects such as rail-Baltica have to overcome many political and budgetary hurdles and might be at jeopardy in the current situation.*

3.2 The impact of the crisis on national budgets has lead to the postponing of investment in conventional systems. However, conventional systems are primary means of transport for average short distance commuters. As they already exist, the ecological impact of these conventional systems is minimal compared to high-speed connections. Considering the transport volumes and density these conventional systems also have a larger impact on pollution and congestion reduction as an alternative for car transport.

3.3 Although the medium distance high-speed networks developed rapidly in the last few decades, extending and interconnecting to the existing networks will be the next big challenge.

3.4 The emphasis on high-speed developments has resulted in under-investment in conventional railway connections, which has resulted in over aged rolling stock and outdated infrastructure, in terms of signalling, energy-efficiency, capacity and safety standards. With further and unbalanced budget allocation on high-speed development this process will continue.

3.5 The conventional systems have developed over 150 years from regional into national systems. The system parameters (gauge, voltage, alignment margins, maximum speeds, signalling and safety) are different per country and, in some cases, even per region. In fact the conventional European network is a patchwork of different systems. Various approaches have been taken to overcome these differences: standardisation (for instance European safety standard); hybrid rolling stock (safety systems, voltage and adjustable gauges) and technical provisions to compensate for limitations of the infrastructure (tilting trains, double decks, etc.).

[1] Boston Consulting 2010:3.
[2] COM(2007) 551 final.
[3] http://ec.europa.eu/transport/sustainable/doc/2008_costs_handbook.pdf.
[4] COM(2009) 44 final.
[5] COM(2009) 490 final.
[6] COM(2011) 144 final.

3.6 As the system is a patchwork, so are the political decisions behind the screen. Any planning involves numerous authorities of local, regional and national origin on the policy fields of transport, spatial planning, and demography, Economical and environmental development. Projects are developed as public or public/private projects and privatised operation is increasing, there are lessons to be learned from the success and failure of projects.

3.7 Political choices lead to a separation of the highly profitable parts of the network and the less profitable and loss-making parts. Decline of service in the periphery of the networks is the result.

3.8 In local transport the further development of metro systems is slowing down and might come to a standstill as a result of high-costs and risks. In many urban areas conversion of closed down sub-urban railway lines into light rail connections and the (re-)opening of tramlines is considered as an alternative to a metro. The domino effect of national austerity plans leads to postponing and mothballing of these plans.

3.9 In the tram sector the industry developed level floor accessibility, energy-efficient chopper technology, power regeneration and catenary-free power transfer (primove and APS), and increased accessibility, decreased CO_2 emissions and overcame aesthetic and practical objections. However, many urban operators still have later versions of the 1930 PCC concept ([7]) in use.

4. **Specific comments**

4.1 Whilst Europe used to be the leading continent in railway development, now the 'the dialectics of lead' amplified by shrinking public spending, will place Europe last in line.

4.2 The need for mobility causes congestion, pollution and longer travel times. Measures such as road pricing might reduce the use of cars, but then there has to be a competitive, reliable, environmental-friendly and comfortable alternative. Introduction of road pricing in Stockholm and London was successful because these cities both have extended metro networks that serve as the backbone of all public transport. City bound commuter traffic could be decreased with road-pricing, if there are efficient door to door alternatives.

4.3 High-density routes on the current conventional rail systems have reached the limits of their capacity. On many routes the service frequency has reached the limits of the safe working system, the train lengths have reached the limits of current platform parameters and the volumes have reached the limits of the clearance profile. More capacity will need major investment.

4.4 Intermodal integration is not yet optimised. Whilst the train brings passengers to the heart of an urban area, commuters need a reliable connection from there to their actual destination, often business zones on the outskirts of cities. Metro, segregated light rail and tram networks can still be expanded, better integrated and improved to decrease average 'door to door' time. Again, this needs major investments.

4.5 Although the development of high-speed networks has gone quickly, most networks 'stand-alone'. The North-East corridor, connections to the East, international connections to and within the Mediterranean are still not competitive with air traffic. Substantial investment is needed to make high-speed rail competitive on more routes.

4.6 Although the Commission presented an ambitious vision in the White Paper ([8]), the strategic outlook of the funding of trans-European rail networks should be clarified. What is the industrial policy of each European country and the European Union in general and how the production of rail equipment fits in to this industrial policy? How realistic are the plans in the face of the economic and financial crisis? How large is the rail transport budget compared to other budgets (asphalt versus rail)? Is global trade policy affecting the European industrial base and what can we do about it? Are tendering procedures really creating a level playing field for the European industry or is it creating opportunities for outsiders whose home market is protected by trade barriers?

4.7 If the decline is not stopped, the sector will lose its attractiveness for young engineers and other skilled infrastructure workers because of the declining long-term perspective and will not be able to compete on the labour market.

4.8 Due to the lengthy development and production time, declining orders will cause a shake-out and shrinking variety of supply and competition.

4.9 In order to survive, companies will have to reduce the number of their locations, decrease their social standards and rely on external flexibility, which undermines the long-term competence base and will result in a further decline of attractiveness of the sector for skilled staff.

([7]) The **PCC** (**Presidents' Conference Committee**) **streetcar** (tram) design was first built in the United States in the 1930s. The design proved successful in its native country, and after World War II was licensed for use elsewhere in the world.

([8]) See footnote 6.

4.10 Without a comprehensive industry policy and proper funding, fragmentation will continue and the European market will lose its leading position. Only a growing home market will allow the industry to maintain the present employment levels in Europe.

4.11 In general, the Member States and their administration of all levels should be encouraged, in particular in these times of budgetary constraints, not to sacrifice investment in necessary transport infrastructure of all modes which is fundamental for a long-term European development strategy also resulting in more jobs.

Brussels, 27 October 2011.

The President
of the European Economic and Social Committee
Staffan NILSSON