

Signal

the European Rail Traffic Management System

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A new vision for transport: **Signal** interviews Vice-President Kallas



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Recently, Signal had the opportunity to sit down with Siim Kallas, Vice-President and Commissioner for Mobility and Transport, to discuss his views on transport and ERTMS.

Signal: What overall vision do you bring to transport policy?

VP Kallas: Transport is essential to virtually every sector of the economy. My vision is one of a sustainable European transport policy

that truly benefits citizens and businesses and contributes actively to the competitiveness of our economy. The transport industry accounts for almost 7 % of the EU's GDP and 6 % of employment and therefore any transformation in the transport sector can have a major impact on the overall economy and on the daily life of citizens.

To achieve this, we need to ensure transport that is safe and secure, well-functioning and that delivers on the decarbonisation agenda. Rail transport can play a major role, but to do so, we need a more integrated, interoperable rail system in Europe.

Signal: In your hearing before the European Parliament in January 2010 you mentioned the removal of technical barriers as a priority action – your example was incompatible rail signalling systems – why?

VP Kallas: I am in favour of open competition which brings benefits to all sectors. However, many obstacles currently exist which hamper the proper functioning of transport systems. This is particularly true in

It is an exciting time for transport. The newly-created DG for Mobility and Transport welcomes Commission Vice-President Siim Kallas as its head. VP Kallas outlines his vision for transport as a whole and ERTMS in particular. We also take a look at the exciting progress being made on high-speed rail in Italy.

The Signal team



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the area of rail transport. I see incompatible rail signalling systems as a prime example of technical barriers that need to be eliminated.

Introducing a single European signalling system, ERTMS, brings benefits to many; it reduces costs for infrastructure managers, helps make freight transport more competitive and of course, improves safety. As a result, rail transport can better contribute to a modal shift from road to rail and play an important part in the decarbonisation of transport.

I am impressed by the committed work carried out over the past few years by the European Coordinator for ERTMS, Karel Vinck, to move this major European industrial project forward. I am very proud that Europe is leading the way with ERTMS signalling technology which is being deployed around the world!

Signal: How will you ensure that ERTMS stays on the agenda?

VP Kallas: There is no doubt that we need strong and coherent funding instruments to support the deployment of ERTMS. By 2013 almost €500 million of TEN-T funds will already have played a major part in speeding up ERTMS deployment.

EU regional and structural funds are an additional opportunity to help remove bottlenecks in transport. In my view, we need to mobilise EU financial instruments as part of a single funding strategy for sustainable mobility. This is especially true for rail, particularly ERTMS.

I look forward to closely following the successes of ERTMS throughout my mandate.

Improving rail safety: the role of the European Railway Agency

The construction of a safe, modern railway network is one of the EU's major priorities. Economic integration and rapid growth in trade have transformed the EU's transport needs. In order to service this integrated market, railways must become more competitive and offer high-quality, end-to-end services without being restricted by national borders. The European Railway Agency is working to achieve these goals, creating a mature and safe European railway that will help to provide an open and competitive market.

The Safety Directive

Member States have different approaches to railway safety including different targets, methods applied, technical standards, certification requirements for staff and railway undertakings. The Safety Directive (Directive 2004/49/EC) focuses on four major aspects:

- the setting up, in each Member State, of an authority responsible for supervising safety;
- the mutual recognition of safety certificates delivered in the Member States;
- the establishment of common safety indicators (CSIs) in order to assess that the system complies with the common safety targets (CSTs) and facilitate the monitoring of railway safety performance;
- the definition of common rules for safety investigations.

The Directive applies to the railway system of the Member States and covers safety requirements for the system as a whole, including infrastructure and traffic management, and the interaction between railway undertakings and infrastructure managers.

The Safety Directive requires that railway undertakings and infrastructure managers establish a safety management system to be able to control risks. The safety management system is based on a commitment from top management of the company, ensuring the involvement of managers at all levels and all staff in the safe operation of the railway system.

Taking action on the national level

The main responsibility for the safe operation of the system falls on the railway undertakings and infrastructure managers. National safety authorities (NSAs) have a supervisory role and issue safety certificates for infrastructure managers and railway undertakings in accordance with requirements in the Safety Directive. Safety certificates necessitate the assessment of the efficiency of the safety management system. There are however differences across Europe in the way the certificates are issued and the way the safety management systems are assessed. The NSAs cooperate at European level to harmonise decision-making criteria in a network that is chaired by the Agency.



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National investigation bodies (NIBs) are required to notify the European Railway Agency of accident investigations and send investigation reports as required. These reports contain recommendations addressed to the safety authorities who report back to the investigation bodies on actions taken. All notifications and reports can be found on the public website of the Agency.

The NIBs cooperate at European level to exchange information and develop best practices. This is organised through a network that is chaired by the Agency. At the request of a NIB, the Agency can give support to on-going investigations and give help and advice. The Agency is also developing guidance documents to allow NIBs to have a common understanding of the requirements of the Safety Directive.

Moving towards safety

In addition to accident reports, the Agency collects information on safety indicators provided by the NSAs consisting of statistical information on accidents, precursors to accidents, cost of accidents and status of the infrastructure.

Every two years the European Railway Agency issues a report on safety performance of Europe's railways based on these indicators and other information. The reports and accident statistics are published on its website. The latest report is available here: <http://www.era.europa.eu/Core-Activities/Safety/Pages/safety-performance-report.aspx>

Many Member States have been late with implementation of the Safety Directive. The bodies established by the Directive (NSAs and NIBs) are slowly being put in place and there are still differences in administrative capacity from country to country. Other elements, like safety management systems, are new to many actors in the railway system and there is a necessary learning curve before all provisions of the Directive are fully implemented. The European Railway Agency and the Commission are working together to ensure that the new regulatory framework is put in place and properly applied. Meanwhile, secondary legislation is being developed to harmonise requirements and to further clarify responsibilities.



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ETCS in Italy: Connecting major cities



13 December 2009 marked a turning point for Italy: an extensive high-speed interoperable train service started on the Italian high-speed network which now extends from Turin to Salerno (1 000 km).

The new Italian high-speed lines have the most extensive application of the European Train Control System (ETCS) Level 2. This system is radio based, does not have fall back systems and national lateral signals.

The latest opening of the Bologna-Florence high-speed line, of which 93% of track, constituting 37 minutes of the journey, runs through tunnels, the Milan-Novara high-speed segment, reducing travel times between Turin and Milano less than an hour, and the new high-capacity/high-speed Gricignano-Naples track which reduces travel time between Rome and Naples to less than 70 minutes, all allow one high-speed train every 15 minutes, a 40% increase, to connect

Rome to Milan in 3.5 hours, with stops in Bologna and Florence, or in 2 hours 59 minutes without stops, or in 2 hours 45 minutes if going from M. Rogoredo to R. Tiburtina. The new timetable also connects Milan and Naples in 4 hours 10 minutes on 36 trains a day, Rome-Verona in 3 hours (6 trains), Rome-Venice in 3 hours 15 minutes (26 trains) and Milan-Turin (14 trains). The new ETCS high-speed lines and trains permit frequent, rapid and affordable passenger services, a sort of 'high-speed safe metro' between the major Italian cities, providing major benefits for the whole economy and society.

Two basic services are foreseen, Frecciarossa (Red Arrow) which will use ETR500 trains and have a speed of 300km/h on the high-speed interoperable lines and Frecciargento (Silver Arrow) which will use Pendolino and new ETR600 tilting trains, through conventional lines to connect major cities.

Umberto Foschi, Rete Ferroviaria Italiana

ERTMS diary

- 19 April 2010: Brussels
ERTMS MoU Steering Committee
- 9-10 June 2010: Brussels
Committee on the Interoperability and Safety of the European Railway System (RISC)

Please send us your dates!

For further information on ERTMS, see: http://ec.europa.eu/transport/rail/interoperability/ertms/ertms_en.htm

To view previous editions of *Signal*, click: http://ec.europa.eu/transport/rail/interoperability/ertms/newsletter_en.htm

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