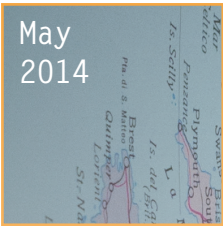
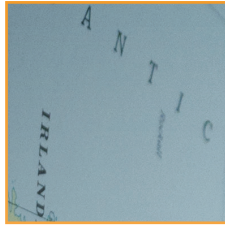




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EUROPEAN TRANSPORT REGULATION

OBSERVER

Rail infrastructure and rolling stock: investments, asset renewal and regulation.

Editors: Matthias Finger, Nadia Bert, David Kupfer

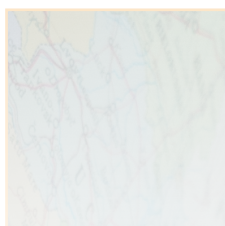
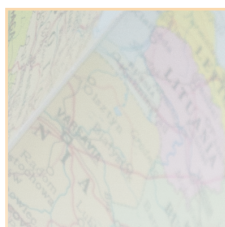
Highlights

At the 8th Florence Rail Forum regulators, operators and network managers came together to discuss investments in railway infrastructure and rolling stock. In light of frequently pointed out investment backlogs in the rail sector the central question was how regulation on the European and national level can provide the necessary incentives for more investment.

Investments in rail infrastructure and rolling stock require clear, stable and predictable rules because of their very long-term nature.

With the 4th Railway package there are several proposals to improve conditions for investments such as strengthening the role of the infrastructure manager to allow a more sustainable investment planning and harmonizing technical standards to improve interoperability. The European Union also plays an increasingly important role in investment financing through Regional Funds, the Connecting Europe Facility and the shift2rail initiative.

There are however different views among the stakeholders in the rail sector on the right strategy and right priorities on the European level which were discussed at the Forum.



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Financing railways: what role for regulation?

A comment by MATTHIAS FINGER | FSR-Transport Director

It is common knowledge that railways require substantial financing... traditionally, such financing has come from the national and regional public sector, but, in the context of the crisis of public finances, railways increasingly also look for innovative financing models such as the EU funds (either through the new Connecting Europe Facility and through regional funds), new involvement of national and supra-national banks (i.e., European Investment Bank), and greater contributions from the private sector. It is especially in this situation where regulatory policies and regulatory conditions are becoming paramount. This was the topic of the last Florence Rail Forum. Three considerations seem to me to be important in this respect:

- the need for a stable and coherent regulatory environment,
- the European Commission's philosophy on infrastructure financing, and
- the European Commission's vision on service financing.

Regulatory economics clearly states that a **stable regulatory environment is key**, namely because of the long-term nature and asset specificity of investments in infrastructures in general and in railway infrastructures in particular. In addition, the literature is clear about the fact that one also needs a **coherent regulatory environment**, notably when it comes to critical technical functions that affect the entire infrastructure system, such as interconnection and interoperability standards. But coherence is also important between national regulatory policies and supra-national (European) ones. In the railway sector, particular attention must also be paid to the alignment of incentives between infrastructure and services, both in terms of system boundaries (international, national and regional transport) as well as in terms of the relevant time period (e.g., investments into the tracks and investment into rolling stock). Finally, in order to strengthen fair competition, attention has to be paid to the alignment of incentives between the different involved actors, such as the public authorities, the investors, the operators and the manufacturers.

The policy or rather the philosophy of the **European Commission** in matters of network industries' financing is quite clear and straightforward, based as it is on resolute unbundling (vertical disintegration): on the one hand, there is the **network infrastructure** (railway tracks, electricity grid, gas grid, telecommunications grid, etc.) whose financing can be public or private. Subsidies are generally allowed for the development of particularly onerous network infrastructure elements. Cross-subsidies and distortion of competition is not considered to be a problem because of the (theoretically) clean ownership unbundling. In the railway sector, it is clearly admitted that financing of the infrastructure comes from the public sector. Ideally, there is a distinction to be made between the financing of the development of the tracks (which clearly depends on public financing) and the operations of the infrastructure, which should be financed by track access charges, but which can also be subsidized by the public sector.

On the other hand, there are the **services** (e.g., energy services, transport services, communication services), which, ideally, should be financed purely commercially. This, in theory, should not be a problem because the costs of the infrastructure has already been separated out. In the railway sector, things are a little bit more complicated, yet can still be conceptualized clearly by way of a distinction between commercial railway services (e.g., long-distance passenger services, high-speed rail services, cargo services) on the one hand, and services under public service obligations (PSO) on the other hand. The former – i.e., both rolling stock and operations – should be financed commercially, while the latter – again both rolling stock and operations – can be subsidized. This to the point that rolling stock may even be owned by the PSO authorities.

So, on paper, all is well, and it seems possible to apply the general considerations that are valid for financing other network industries to the railway sector as well. Financing will be provided by the public sector for the infrastructure and for the PSOs, whereas the market will provide the financing for the rest. Because of clear unbundling there are also no market distortion issues, even though there may be market dominance issues. Regulation, however, is needed in matters of access to the infrastructure, pricing of the infrastructure, interoperability, interconnection, and scarce capacity management. Regulation is assumed to be strong and stable, so that this will not be a problem either.

Our Florence Rail Forum, however, discussed the reality of investments, and this reality relates to regulatory policy and regulation. Three problems appeared particularly striking:

- There is first the problem that **regulation is not strong and stable**, resulting in the overall argument and admission by the EC that regulators have to be strengthened so as to ensure the stable regulatory framework that is required for this overall approach to work. Not to mention the fact that this beautiful conceptual system has not (yet) been implemented European-wide either.
- There is secondly the problem that there are significant **inconsistencies** between the European regulatory framework on the one hand and the national regulatory practices on the other. There is often little coherence between the infrastructure managers across Europe, as well as between the different national regulators, all adding to the insecurity for investors.
- There is thirdly the problem of **intermodality**: indeed, one may question whether a coherent, stable and strong regulatory framework in the railway sector even makes sense, considering that competition comes from the road. As everybody knows, there are huge incoherencies between the way the road is financed and the way railways are financed. Only an overarching financing or pricing policy (e.g., mobility pricing) across the transport modes will ultimately create the security needed by the private investors into the railway sector.

In conclusion, one may ask whether it is advisable to first focus on the perfection of the model (unbundling, financing, regulation) or to open the black box of intermodality and to reconsider railway financing again in this new light (e.g., mobility pricing).



Summary of the discussion at the Forum

The discussions during the 8th Florence Rail Forum addressed a wide range of arguments relating to investments in infrastructure and rolling stock. The first part focussed on infrastructure and the second one on rolling stock. In particular the discussion looked at how legislative initiatives impact on investment decisions in the two areas. The debate was structured around the four following questions.

Infrastructure: European and national regulation, which are the regulatory obstacles for more investments?

The discussion made quite clear that for many actors regulation as such is not perceived as an obstacle to investments. Instead, some of the most frequently mentioned barriers to investments were regulatory instability and lack of harmonisation. Moreover, some regulatory reforms aimed at encouraging innovation and investments at the European level were presented. The controversial discussion on this will be presented in this section.

It was pointed out that, in spite of the complexity of factors influencing investments, the sources of finance remain limited to user charges and tax-money; therefore any increase in investment needs to be accompanied by an increase in revenues from either of these sources.

A central problem that was identified in the discussion is the short term nature of politically motivated investment planning vis-à-vis the long term nature of rolling stocks and infrastructure. This can be overcome if governments are “forced” to have a more long term strategy and to provide the necessary means to ensure future maintenance and renewal of the infrastructure. In order to address this problem the Recast of the First Railway Package foresees **compulsory development**

plans (Art. 30(2)) that are fixed in the form of contracts between governments and Infrastructure Managers with a minimum duration of five years. These plans have to define the allocation of funds for maintenance and renewal, how maintenance and renewal backlogs are to be dealt with and which new infrastructure is planned. In the discussion it was pointed out that contracts with an even much longer duration would be required to realistically reflect the very long term nature of rail infrastructure investments. Nevertheless these five years are already considered an achievement, given the strong political resistance of member states to binding rules on issues linked to public expenditure. Governments’ reluctance to agree on rules that limit their spending autonomy points to the general problem with funding of rail infrastructure: as was also mentioned during the debate the decision over the spending of (future) tax revenue is the prerogative of national parliaments. Therefore, as long as there is a high percentage of public money in the rail sector a certain “politicisation” of its spending is unavoidable.

From an EU policy perspective it was however countered that the Commission, rather than controlling national spending, aims at **creating a link between governments and the infrastructure managers** in order to make planning more sustainable. Many problems with rail infrastructure investments in Europe were the result of a lack of accountability of governments in terms of their spending commitments for maintenance and renewal of infrastructure. It was said that, in some countries, no realistic business plans were drafted when new infrastructures had been built. Therefore, it was not possible to maintain and sustainably run the network that was initially offered.

To improve the performance of infrastructure managers another Commission proposal foresees the establishment of a **European Rail Infrastructure**

Competition and Third Party Access in European Railroads

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Market liberalization, third party access regulation and the proper incentives for railroad investments

The long-lasting process of market opening on the EU railway markets abolishing all legal entry barriers is converging into its final round. The basic philosophy of third party access policies is that the owner of an infrastructure is obliged to provide non-discriminatory access to competitors on the (downstream) service markets. The term (mandatory) third party access only makes sense in the context of vertically integrated industries. In the context of the 4th Railway Package proposed by the European Commission on January 1, 2013 a proposal for amending Directive 2012/34/EU has been provided aiming to strengthen ex ante third party access regulation. In particular, an integrated railroad company must not have control over the decision making of the infrastructure manager.

From essential facility doctrine towards theory of monopolistic bottlenecks

The concept of third party access continues pursuing to balance the trade-off between property rights and competition on the track. The essential facilities doctrine has its origins in US antitrust law. In accordance with this doctrine, a facility can only be regarded as essential if the following two conditions are fulfilled: (1) market entry to the complementary market is not actually possible without access to this facility, and (2) providers in the complementary market cannot, using reasonable effort, duplicate the facility; substitutes do not exist either. Case-by-case identification of essential facilities by court judgments does not guarantee a consistent localization of market power in liberalized network industries. The proper design of ex ante regulation requires generalizing the concept of the essential facilities doctrine to a class of facilities with the characteristics of a monopolistic bottleneck. The conditions governing a monopolistic bottleneck are met when a natural monopoly exists and a single provider is able to make the facility available more cheaply than several providers; and at the same time the facility cannot reasonably be duplicated as a way of controlling the active provider, in other words when there is no potential substitute. This is the case when the costs of the facility are irreversible.

The danger of overregulation

According to the proposed Article 7c amending Directive 2012/34/EU the Commission would gain the competency to decide whether providers of train services belonging to vertically integrated railway companies are allowed to become active (on a home market or a foreign market). Even the fulfillment of access regulations in the proposed Articles 7a and 7b would not necessarily guarantee the right to enter the markets for train services. The problem of enforcement of third party access regulation is thereby mixed with ad hoc evaluations of the Commission whether a level playing field on the relevant markets of train services can be observed. Such a regulation would be completely anti-competitive and not compatible with the disaggregated approach of regulatory economics. It would be a combination of two failures: misunderstanding the many faces of competition on the markets for network services and mistrust of the proper application of the instruments of third party access regulations.

The compatibility of cabotage and third party access

Since market opening will not be finished until train companies in Europe do have free entry to the markets for domestic passenger train services throughout Europe, the issue of cabotage remains topical. Thus, cabotage is no longer per se forbidden. However, such a market entry and in particular cabotage must not conflict with public service contracts. The question arises whether there is an unsolvable conflict between cabotage and the provision of public services.

In order to strengthen competition on the international and national long distance markets for train services it is necessary to allow all forms of competition on the track and simultaneously raise an entry tax in order to compensate the holder of the exclusive right for providing subsidized train services. Subsequently the stated conflict between competition on the track and competitive tendering with exclusive rights to provide subsidized train services would disappear.

Managers Platform. This platform should help to disseminate best practices and to increase the pressure for taking into account better the requirements of the infrastructure. This proposal was considered helpful by many participants because it aims at **redefining the role of the infrastructure manager**.

How this role should evolve was discussed from different perspectives, leading to the conclusion that **a more holistic approach to network management was needed**. The scope of the tasks of the infrastructure manager should not only entail track allocations and charging, but also strategy, operations, long-term planning, maintenance and modernisation. In the Commission's approach the infrastructure manager shall adopt a business plan, which includes investments and ensures optimal use and development of the infrastructure.

The issue of **track access charges** was discussed controversially on several points. As a general rule, infrastructure managers may charge direct costs that can be raised by several mark-ups. In order to stimulate market entry in some segments where there is little or no competition operators may only be charged with the direct costs. The question was raised whether this approach creates a disincentive: since a new market entrant faces low track access charges and knows that mark-ups can be increased later on once he becomes more profitable, he might not have the incentive to actually increase its efficiency. It was however also pointed out that this effect is mitigated by the fact that mark-ups are oriented at the average profitability of a narrowly defined market segment, and are not defined on a case-by-case basis.

Another element that was stressed in the debate was the need to focus investments on international corridors and specifically on links. It was however also pointed out that answering the question "who will get the money" on the European level can be a problematic issue as investments have a distributional effect as well and may not in all cases exclusively follow the logic of facilitating the best possible connections. For the freight sector the argument was made that

improving the network and building links would be more important than focussing on competition enforcement. For the freight sector more than for passenger transport, the quality of the network and better connections, in particular to the big ports, are essential. The shift2rail initiative was praised by many especially because it focusses on the connection with businesses and is the sort of effort that is needed to make planning more efficient as it incorporates the operators into the planning process.

On a more general note it was pointed out that, while on many issues there was agreement about the desirability of outcomes (more investments in rail), some underlying conflicts remain unresolved: for instance, how can the welfare improving effects of flexible tariff structures be combined with the imperative to increase revenues and to increase investments? Some rail companies feel that they simultaneously should charge less and invest more. Another conflict pertains to the use of tax money and the question on how to allow the necessary parliamentary oversight over the spending of public money without interfering with business decisions of a rail company?

From the Commission's perspective these problems are solvable when looking at the long term strategy: currently there can be no direct correspondence between revenue and expenditure in the rail sector as it is not a profit making business. Therefore the focus lays on maximising the long term revenues of the rail sector by increasing the revenue base, i.e., by generating more passengers and more freight on rail. To achieve this goal it would be justifiable, for example, to keep track access charges low in order to get more competitors onto the tracks and to maximize utilisation of the network. This will pay out at a later stage when rail enterprises will eventually become profitable and hence state subsidies could be reduced.

A somewhat different perspective was voiced in terms of the overall philosophy in the rail sector: what is needed is a stronger focus on innovation. As some examples have shown, the drive for a more efficient rail sector comes from the demand side. A certain

habit of the sector to rely on or ask for more public funding could impede a more business-oriented and innovative approach.

Infrastructure. How to overcome the investment gap? Best practices and possible solutions?

During the second session some existing and proposed regulatory measures aimed at overcoming the lack of investment in rail infrastructure at the European level have been discussed from different angles. Furthermore several examples of the concrete experience of rail operators and infrastructure managers in this field have been presented.

Long term infrastructure planning and independent regulators: the UK as an example?

The United Kingdom appeared to be a particular case that was referred to on various occasions and served as a benchmark for different issues. Most importantly, the level of rail investments in the UK is currently higher than it had been for most of the country's history. Consequently, 'bridging the investment gap' is not precisely the challenge the UK is facing at the moment. Nevertheless, the issue of investment backlogs and the need for large scale renewals remains an issue both in the UK and in the rest of Europe.

The British case was also interesting as it represents a unique model of separation of tasks and allocation of responsibilities between railway operator(s), infrastructure manager (Network Rail) and the regulatory agency (Office of Rail Regulator). Much in line with the European Commission's vision, this model aims at linking government and the infrastructure manager. The regulator is in a powerful position and can act as an arbitrator between the demands of the government and the ability of the network manager to deliver on these. The regulator can ultimately force the government to either allocate more money for maintenance and renewal or to reduce foreseen outputs. On the other hand, it can also

evaluate whether the infrastructure manager is making efficient use of its funds and appropriate planning for the development of the network.

There were different opinions as to how much competence the regulator should have. It was mentioned that the Commission had been advocating a strong regulator like in Britain for the entire EU, but member states were strongly opposed and would not even allow regulators to be entitled to give an opinion on the government plans.

Another element on which different opinions were formulated was whether or not the infrastructure manager should have the possibility of making debt. Network Rail has partly been financing its investments by taking loans and currently uses 1/3 of its funding for debt financing. The European regulations do not allow debt financing of infrastructure by the network manager with refundable bank loans. According to the Recast, accounts of the infrastructure manager have to be balanced at least over a period of five years. Nevertheless, some elements allowing the use of private funds for rail infrastructure investments were introduced in the Recast.

National financing of railroads: sustainability of investments and capacity problems

Some of the problems related to state investments in infrastructure became apparent in the German case. On the one hand, there is a clear division of tasks between the government and the integrated rail company Deutsche Bahn (DB). Infrastructure investments (new and upgrading projects) are financed by the federal government, and operations as well as maintenance are financed by DB, while DB also co-finances part of the investments in the infrastructure. A problem arises when the government "does not fulfil its promises" in terms of its foreseen investments. Over the recent years, DB has had to increase its share of infrastructure financing in order to fill these investment gaps. The rules under which DB conducts infrastructure financing are however different from those of the State: the rule for DB to "act as a commercial enterprise" is of

constitutional rank in Germany. Therefore an increase in investments has to be balanced with an increase in revenues, and investments can only be done where they offer a sufficient return.

It was said that in many countries the process of determining infrastructure financing is done in a way that is not conducive to a sustainable management of the infrastructure. In many cases the process begins with, firstly, a certain amount of tax money being allocated. Secondly outputs being defined and thirdly leaving the amount needed that is not covered by the allocated tax money to be earned with track access charges. In principle, it should however be the other way round: first governments should define how many revenues are to be expected, then define which investments will be done and finally allocate the necessary funding.

In some cases this principle had to be enforced by means of legal procedures. According to the European Commission, a sustainable funding system cannot be achieved if revenues from track access charges annually depend on what a government is willing to spend. In some cases, the result may be that capacities have to be reduced, which makes sense when there is not enough money available for proper maintenance. On this point, it was however also stressed that the political difficulties for closing down rail tracks and stations should not be underestimated, therefore “reducing capacities” cannot easily be done in the rail sector.

It was furthermore questioned whether solving the capacity problem would need an amount of cooperation that would be in conflict with the strict approach to network governance that is followed by the European Commission and which foresees a strict separation of network and service provision. There was agreement that addressing these issues is becoming more urgent with increasing transport volumes and that investments need to be focussed primarily on bottlenecks and links.

European financing for enhancing (passenger and freight) rail competitiveness

In the debate it was also pointed out that rail freight and passenger transport in spite of mostly being a monopoly not all economic principles related to this apply. This is because they are substitutable by road transport. Economic regulation has also to make sure that rail becomes more competitive in comparison to road transport.

The TEN-T and CEF initiative were praised as a good way to invest in pan-European connections. However, criticism related to the planning of investments was voiced. Concretely, a project was mentioned where in spite of an investment volume of over 100 million euro for the rebuilding of a bridge between Bulgaria and Romania, no actual cost reduction for the freight operator using the track was achieved. In this case investments should have focussed more on the electrification of feeder lines to the bridge because without those the additional costs of using the bridge are higher than those of using the longer, traditional connection.

To address this and similar other problems, a better coordination with the industry and the operators was called for, in particular with regard to freight.

Rolling-stock. Are there alternative approaches to investments in rolling stock?

In spite of operating under a business approach, railway undertakings are still special and different from other business in many aspects. This relates partly to the characteristic of rolling stock as an “asset”.

Rolling stock as a liquid asset?

Compared to airplanes, railways are lagging behind in terms of international harmonization of technical and safety standards as well as interoperability. This has an impact on the “liquidity” of rolling stock as an asset. It was pointed out that in aviation, with the help of EASA, achievements in terms of technical harmonization have been made that could serve as an example for the rail sector. As international traffic is growing and rail companies operate in different markets, interoperability becomes more and more

important. Rolling stock can become a more liquid asset if regulation is harmonized across Europe.

There have been numerous efforts in the EU for harmonization and standardization over the past twenty years, leading to the current proposed 4th Railway Package. However many challenges remain for achieving the needed degree of harmonization (see also the workshop papers of the [6th Florence Rail Forum: the technical pillar of the 4th Railway Package](#)).

How to facilitate investments?

If there was better harmonization and coordination, more investors could be interested in the EU rolling stock market. This claim was put forward especially after having looked at the Japanese case, where the operators are fully private, no government procurement rules apply and where the process of vehicle validation is much more linear than in most of the European countries.

Another effort to attract private investments is the Luxembourg protocol which is currently seeking ratification by the European Union member states (see Giulia Mauri's contribution). This protocol aims at establishing a global system for recognition and registration of security interests in rolling stock. This would reduce risks and costs for private investors financing rolling stock.

Rolling-stock. How does current and planned European regulation influence asset renewal, investment and innovation in rolling stock?

Clearly, regulation has a substantial impact on investments in rolling stock. In the discussion particular attention was paid to how PSO-contracts and tendering relate to investments in rolling stock.

PSO contracts and tendering procedures

Despite the fact that tendering of PSO-contracts has become the norm in many EU countries, rules on how the tendering procedures shall be conducted often still have deficits. One part of this discussion focused on

how regulation of PSO-contracts and tendering relate to investments, as an uncertain regulatory framework can hamper long term investments. This was illustrated for example on the Italian case where many tendering procedures will not be completed before the new contract period is due to start, yet rules on how the transitional period should be governed are not in place.

However, from the Commission's perspective the implementation of functioning tendering procedures is the only possible solution because it would bring transparency and clarify the relationship between the contracting authority and the operator.

A discrepancy was noted in terms of the timing of investments and the length of contracts. Rolling stock can usually run for up to 30 years, and investment in new rolling stock typically requires a contract period of 12-15 years to be cost-effective, however concessions last on average only six years. It was therefore called for some regulatory harmonisation that would allow operators to either cascade rolling stock to the new winner of the concession or to the client body, or that rolling stock can be moved to a different location where the owner of the rolling stock operates.

The absence of such regulation can prevent competition because possible market entrants are unable to get bank loans for rolling stock without a sufficiently secured revenue base. The Commission proposes to tackle this problem by giving the public authorities the possibility to provide guarantees and make the rolling stock available to the subsequent contractor. Another possible way of tackling the issue is a functioning second hand market for rolling stock. An impediment for this is the fact that operators prefer scrapping wagons instead of selling them to competitors. Nevertheless, harmonisation of technical requirements would help to establish a functioning second-hand market for rolling stock.

A downside of giving authority over all aspects of the tendering process to the regional transport authority is that it leads to the problem of different technical requirements in every region, which again impedes a second-hand market for rolling stock. Furthermore,

The Unidroit Convention on International Interests in Mobile Equipment as applied to Rolling Stocks: making financing of rolling stock attractive to private funds

GIULIA MAURI | Brussels Representative of the Rail Working Group and Partner at Verhaegen Walravens

Rail operators with an international exposure and activity know that buying or leasing rolling stock is a choice that it is only partially their own.

In Europe different models for the provision and ownership of rolling stock co-exist. Indeed, the rolling stock may be leased from a ROSCO (rolling stock operating company), it may be provided by the operator or the operator may be obliged, under the relevant tender documentation, to buy the existing rolling stock at a pre-agreed value or to lease it from the relevant public body. More often than not, the choice of the model applied to the relevant transaction is left to the concerned public body.

The financing of rolling stock is nowadays achieved through different models that favour public spending in certain countries and encourage private funds to enter the market in other countries.

Presently, there is no general framework for taking security over financed rolling stock and the entry of private capital in this market is still quite low. A major barrier to entry of private capital is certainly the limited “liquidity” of the financed asset. Indeed, increased standardization and interoperability will certainly help private lenders and lessors of rolling stock to be able to re-sale or re-lease the same asset in different countries. Another major obstacle to more private financing of rolling stock is linked to fragmented and obscure national regulations.

There is a general acknowledgement that a lack of harmonization and a lack of transparency in relation to the legal framework applicable to security on rolling stock lead to a lack of private funds invested in this sector.

Indeed, private sector funders require that the credit that they provide, under the form of loans or leases, will be repaid and that their property rights or security rights will be respected even when their collateral (i.e. the relevant rolling stock) moves across borders or even if it remains in the state where it was originally funded. The main problem is that there is no international registry system for the security interests of financiers on the relevant rolling stock and therefore the risk in financing such an asset remains high. This translates into high rates of lending.

The Unidroit Convention on International Interests on Mobile Equipment provides an answer to financiers and operators alike by introducing much needed uniformity and transparency in relation to security over rolling stock.

The Convention, as applied to rolling stock, was approved at a Diplomatic Conference in Luxembourg in February 2007, sponsored by OTIF (Intergovernmental Organisation for International Carriage by Rail) and by Unidroit. The Convention provides for an international system of recognition and registration of security interests in rolling stock, therefore protecting lenders’ and lessors’ interests in the assets that they finance.

The Convention applies to rolling stock, broadly described so as to include also trams and high speed trains. An international electronic registry is created, which allows the registration of the interest of a lessor under a lease agreement, the interest of a bank or other financier taking security over the asset as part of a loan or another credit facility agreement.

The registry will be accessible 24/7 by any interested party facilitating prospective creditors checking any existing claim on the asset that they intend to finance.

The Convention also creates a common system of repossession of rolling stock in case of default or insolvency of the debtor subject to specific safeguards such as public interest’s obligations.

By reducing risk for rail equipment financiers, the Convention will attract more private funds into the market possibly resulting in cheaper finance for operators and will facilitate short term operating leases of rolling stock so as to introduce greater flexibility in the management of operators’ fleets.

Moreover, it is also estimated that a more reliable system of security over the asset could encourage not just the development of a strong leasing market to railway operators from financiers but also between operators ensuring more efficient use of rolling stock.

For the text of the Convention as well as helpful articles, notes and papers, please see “<http://www.railworkinggroup.org>”

there is often the political wish by the transport authorities to have new rolling stock. There was an agreement that a next step should therefore be an increase in harmonisation of train specifications.

In regional transport a variety of arrangements between public authorities, operators and rolling stock companies exist. For instance, maintenance can be the responsibility of the contractor in countries like Germany and the Netherlands, whereas in Sweden maintenance is under the responsibility of the transport authority and directly contracted. Different models for financing rolling stock were discussed as well.

Different opinions were formulated as to whether PSO-tendering can facilitate financing. From the different examples that were presented it emerged that there was a varying degree of competition for PSO-contracts which had an impact not only on the price for services but also on the cost of rolling stock. A study presented comparing average costs and delivery times of for electric multiple units (excluding double-deck vehicles) in Germany and France showed that France paid on average 22.5% more per car and has a delivery time of over three years whereas in Germany it is two years. In Germany there are eight different operating companies on the purchasing side and four different rolling stock suppliers, whereas in France there is only one operating company and one supplier for this type of train.

On this point it was also discussed whether mandatory tendering of PSOs should have been kept in the European regulations as this was initially intended by the European Commission. The European Parliament had insisted on replacing the provision with mandatory performance parameters to bring down costs. For the advocates of tendering there was a clear case that market competition brings down prices automatically whereas performance parameters create additional bureaucratic costs with unclear benefits.

Some limitations of open market tendering and those of the presented alternative models of financing and maintenance of rolling stock were also pointed out; first of all, the long term nature of the contracts leaves little

room for actual competition. Another problem relates to take-back guarantees for rolling stock: if a take-back guarantee is provided the public transport authority is deprived of the possibility to renew the rolling for each contract. If there is however no guarantee, all the risks and costs are borne by the transport operating company which is the case for the German Länder. From the point of view of an incumbent operator, those models were in the first place a response to shrinking budgets of the public sector that only create short term savings but do not bring down costs in the long run. From this point of view decisions over maintenance and train specifications are best left with the train operating company that has sufficient knowledge and experience.

Costs of standardization in rail freight

An element that was brought forward was the cost aspect of European regulation on standards for freight trains on wagon keepers. A study that was presented in the discussion on the economic effects of four recent regulations on wagon standards showed that investments that would have to be made to comply with the regulations are quite substantial and range up to 68% of current costs. This is in particular related to retrofitting for noise standards. The Commission is in a difficult position on this issue, as for the majority of member states, the Netherlands and Germany being the only exceptions, noise reduction is not a priority and they would therefore not agree on making the higher and more costly requirements a standard for all of Europe. The Commission proposes to offer compensation to the investors by allowing a rebate on track access charges for retro-fitted wagons.

Another element was that intermodal competition has to be borne in mind when drafting legislation. In the case of safety regulation it was pointed out that necessary investments resulting from increased safety standards may result in increasing the cost for freight transport and thus shifting freight from rail to road.

Further readings

[Florence School of Regulation Transport Area, 2014, 8th European Rail Transport Regulation Summary: Rail Infrastructure and Rolling Stock: investments, asset renewal and regulation](#)

This document summarises the content of the presentations delivered during the 8th Florence Rail Forum, offering short summaries of each presentation, and illustrating the main points made and matters treated. Presentations were delivered by representatives of different types of stakeholders, who reacted to the same initial questions that have been addressed in the present Observer:

- Infrastructure. European and national regulation: which are the regulatory obstacles for more investment in infrastructure maintenance and modernisation?
- Infrastructure. How to overcome the investment gap? Best practices and possible solutions?
- Rolling-stock. Are railway operators limited in their business approach? Did the shrinking public funding and the presence of new rail operators impact on innovation?
- Rolling-stock. How does current and planned European regulation influence asset renewal, investment and innovation in rolling-stock?

[Messerlin Patrick, 2013, The Japan-EU Negotiations on Railway, Policy Brief No3/2014, Ecipe - European centre for international political economy](#)

Despite major advancements in the Japan-EU FTA (JEUFTA) negotiations, the talks remain difficult in the railway sector. These difficulties flow largely from the fact that the Japanese railways are organized on a radically different legal and economic basis than the railway systems in the EU. First, the three major Japanese passenger rail companies, are totally privatized, listed on the Tokyo Stock Exchange and do not receive public subsidies. Japanese firms are even “more private” than an US railway company such as Amtrak, funded by federal money. In the Japanese deregulation, the markets remained unbundled with passenger rail companies owning both trains and tracks.

[Paolo Beria, Emile Quinet, Gines de Rus, Carola Schulze, 2012, A comparison of rail liberalisation levels across four European countries, Research in Transportation Economics, 36\(1\)](#)

This paper presents the results of a research into railway regulation and liberalisation in Italy, France, Germany and Spain. The analysis covers

the relationship between the State and the rail companies, network access conditions by operators, slot allocating and pricing schemes and how public service obligations are defined, financed and regulated.

The aim of the paper is to give a comparative overview of the regulation of railways. The regulatory frameworks are described and then assessed according to their implications on the degree of liberalisation and on their actual market opening.

The conclusions are that the actual level of market opening is still limited and, only in some cases, is the liberalisation improving. Entry in the industry has not yet developed its full potential. An issue emerging in this research is the opposing attitude of incumbent railways against liberalisation and the role of governments in backing this behaviour.

[Yves Crozet, Florian Chassagne, 2013, Rail access charges in France: Beyond the opposition between competition and financing, Research in Transportation Economics, 39\(1\)](#)

Access charges to the railway infrastructures, and in particular of the high speed lines, poses many theoretical and practical questions. Besides the need to decide whether it is better to apply a principle of marginal cost or a full cost approach, a difficulty arises with regard to the possibilities of competition between various operators. France is especially affected by this problem since access charges are particularly high while at the same time competition is non-existent. Is this absence of competition explained by the high level of access charges? After describing the principles which underlie the pricing scheme for high speed trains in France, this paper attempts to find out if these tolls constitute a barrier to entry. After building a model that summarizes the components of supply and demand on the Paris–Lyon journey, this paper shows that the considerations relating to demand (peak hour or off-peak hour) are more fundamental than access charges, which do not in themselves constitute a barrier to entry. Barriers exist, but they involve access charges in relation to the allocation of slots which would make it possible to guarantee certain profitability to a new entrant. Break-even points are proposed which show that SNCF's potential competitors have margins for manoeuvre.

[European Parliament Library Briefing, 2013, The Fourth Railway Package, 06/03/2013](#)

The 4th Railway Package is the next step towards the European Commission's vision of a Single European Railway Area. The proposal was published in January 2013 and is currently under discussion by the Council of Ministers. The European Parliament Library offers a short summary and analysis of the most important measures of the Package.



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The Florence School of Regulation (FSR) is a project within the European University Institute (EUI) focusing on regulatory topics. It works closely with the European Commission, and is a growing point of reference for regulatory theory and practice. It covers four areas: Communications and Media, Energy (Electricity and Gas), Transport and Water.

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