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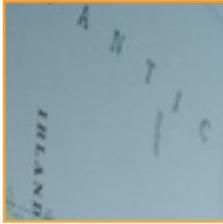
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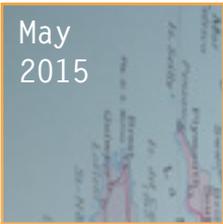
EUROPEAN TRANSPORT REGULATION OBSERVER

Rail Freight in Europe: How to Improve Capacity and Usage of the Network?

*Editors: Matthias Finger, Nadia Bert, David Kupfer*

Highlights

There is a shared vision across Europe to develop a rail freight system that is capable of significantly shifting freight traffic from road to rail.

The 10th Florence Rail Forum was an opportunity to take stock of achievements and remaining challenges on the way to that goal. The central focus lay on the most crucial initiative in the area of rail freight infrastructure: the Rail Freight Corridors. Their aim is to eventually establish a network of fully interoperable corridors that allow seamless cross border freight transport throughout Europe.

Discussions at the Forum addressed several challenges among others technical barriers to interoperability, diverging standards and safety requirements, language requirements for train drivers and the conflicting issue of network access priorities.

The 10th Florence Rail Forum underlined the importance of a European dialogue and closer cooperation to achieve what is shared among all actors in the rail freight business. Against the background of growing traffic volumes and strong competition from the road sector, the European rail freight sector has no choice but to push these processes forward.

Rail freight corridors: the challenges ahead

A comment by MATTHIAS FINGER | FSR-Transport Director

Rail Freight Corridors (RFC) are the backbone of the European Commission's vision for rail freight 2050, as laid down in the 2011 White Paper on Transport. Indeed, to achieve a reduction of 60% in GHG emission by 2050, the transport system should become more competitive and efficient in the use of resources. To do so, more than 30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050, facilitated by efficient and green freight corridors. The implementation of the RFCs should be consistent with the development of the Core Network Corridors introduced in 2013 to facilitate the coordinated implementation of the (core) network outlined by the new Trans-European Transport Network (TEN-T). Namely, the new Core Network Corridors are multimodal (rail, road, aviation, inland waterways and ports) corridors covering passengers and freight, their main role being to remove bottlenecks, build missing cross-border connections and promote modal integration and interoperability. The integrated development of the RFCs would strengthen the position of the rail transport mode within these corridors. The nine RFCs have the aim of offering customer-oriented rail freight services of quality with improved capacity and harmonized standards (full ERTMS deployment required by 2030). They are to be managed by a dedicated governance structure offering a Corridor One-Stop-Shop (C-OSS) to the customers.

The 10th Florence Rail Forum discussed the main challenges to the implementation of the RFCs and to making European rail freight more competitive more generally. The four following challenges were identified:

- **The challenge of bureaucracy** has indeed not yet been fully removed: inhomogeneous rules continue to exist between the different countries, creating unnecessary roadblocks to smooth rail passage. Such roadblocks – which are not by themselves political in nature – should in principle be removable, and a more active use of the information and communication technologies should indeed facilitate the exchange of data and information among the corridor operators (and ultimately among all network operators), as well as between the different infrastructure managers and their customers.

- It will become increasingly important and, at some point required, to **develop performance indicators** for the different RFCs. This will automatically lead to the benchmarking of corridor performance. Measuring performance in infrastructure management has already been
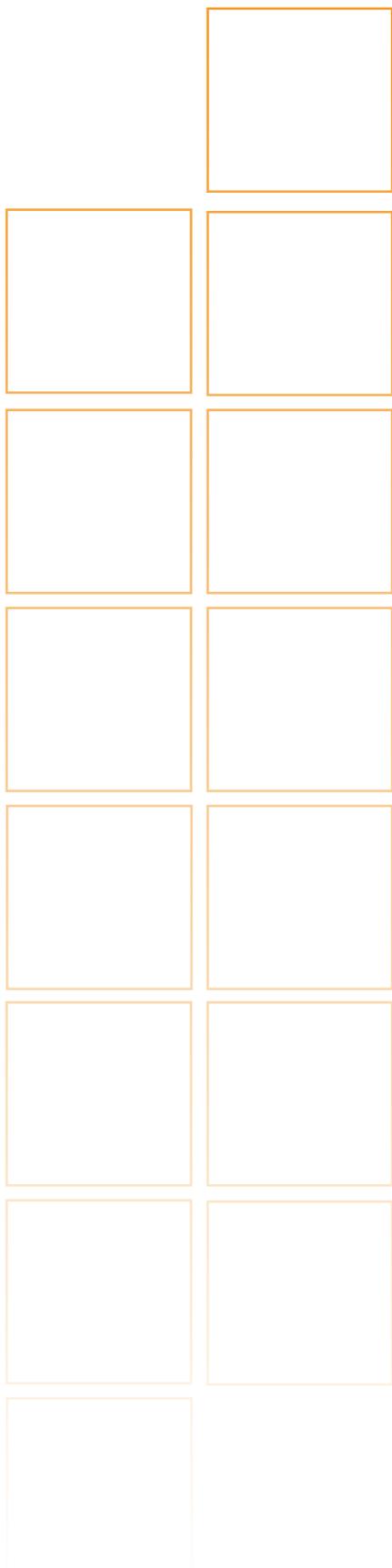
introduced in other sectors, the aviation sector, and especially air traffic control, being a case in point and perhaps inspiration for RFCs.

• RFCs, as said above are the backbone of a truly European rail network. The gradual **Europeanization of RFCs** is therefore another big challenge. Indeed, RFCs should not simply be optimized each for themselves; interoperability on these corridors should become European and there is strong need for a European body to oversee this process. The European Railway Agency, is probably the most likely candidate.

• This also means that we should **move, over time, from a single (9) corridor-perspective to a European network perspective**. This will of course raise further challenges in terms of governance (how to move from a governance of a single corridor to a governance of a network?) as well as in terms of regulation (how to move from the regulation of one corridor to a European wide freight network regulation?). This in turn will raise the question of the role of the national regulatory authorities, which will most likely have to collaborate more closely so as to ensure a coherent regulation of the European network.

In addition, the Forum raised, but did not fully discuss, a series of other issues which will inevitably emerge as the RFCs are becoming fully operational. Among those are the issue of the multimodal interfaces of the rail corridors with ports and terminals. Inevitably, ports and terminals will have to be treated together with the RFCs so as to ensure a smooth customer experience in the future. Another core issue that remains so far little addressed is the question of conflicting demands between passenger and freight. Especially in densely populated areas passenger transport requests are prioritized over freight, thus contributing to freight's lack of competiveness with road transport, a largely unaddressed issue so far. This in turn raises the question of dedicated investments for boosting rail freight. Finally, there is the issue of the growing role of digitalization of transport, passenger and freight. New operators exploiting transport data are entering the freight (and the passenger) markets bringing with them new business models with yet unclear consequences for rail freight operators. The deployment of IT infrastructures in RFCs therefore requires particular attention.

In this sense, RFCs can and must be seen as a laboratory or experiment, a testing ground for European rail coordination, integration, performance and ultimately competitiveness. An "intelligent deployment" of corridors, paying particular attention to standards (ERTMS), IT solutions and targeted investments is required. It is obvious that RFCs need to succeed in order to achieve the vision of a European rail network that is capable of competing successfully with road transport.

Matthias Finger

10th Florence Rail Forum
Summary of discussions

Discussions at the 10th Florence Rail Forum addressed European regulation of the rail freight sector. Discussions were structured around three main points:

- Rail freight transport in Europe: current situation and existing regulation

- How to achieve modernisation and interoperability of the European rail freight network?

- How to increase capacity and usage of the Network? The development of Rail Freight Corridors

1. Rail freight transport in Europe: current situation and existing regulation

The first segment of the discussions focussed on the needs of the rail freight sector and on existing regulatory initiatives at the European Union (EU) level, in particular the Rail Freight Corridors (RFC).

The regulatory framework for the rail sector on the EU-level is very detailed. Yet the added value of European level intervention is perhaps the highest in rail freight. In a certain sense, focussing on rail freight means a "back to the basics" for European rail policy. Today there is a new urgency to act in this sector due to the increasing freight volumes, the need to strengthen the more sustainable means of transport such as rail, and greater competition with the road sector.

Most freight traffic in Europe is cross border. There is a European market for goods and hence customers of freight companies expect seamless cross border transport throughout the EU.

The road freight sector is able to deliver that while the rail freight sector still faces many obstacles. At the Forum operators presented and discussed a variety of challenges in delivering freight on rails across borders.

These include waiting times at border crossings, necessity to change personal at borders, language requirements, and different allowed maximum train lengths. The discussion also addressed the improvements of the road freight sector. Mega trucks are already allowed in several Member States. Meanwhile innovation is rapid, as trucks become more efficient, and shorter vehicle lifetimes make it possible to rapidly replace existing trucks with the newer models.

As these issues persist framework conditions make it hard for rail to compete with road in cross border freight. Yet there was also a major point raised on the need for changes within the rail freight companies: while the legal and technical framework conditions are most crucial, rail freight companies also need to develop a stronger customer orientation and become more open to change.

The discussion showed that different parts of the European rail freight system are at different stages of their development towards an integrated European system. This process causes "growing pains" on some parts of the system: a truly European system would require some form of European infrastructure management, European corridors and "European Players" on the side of the operators. Currently the business model of those that already act on the European scale is handicapped because they cannot offer their customers reliable services across borders. On the other side the infrastructure managers face conflicting demands as they need to apply national law while also working in the context of the European RFC.

The RFC are among the key elements of EU rail freight policy. They are part of the broader Network Corridors concept and aim at establishing a network of harmonised rail freight paths throughout Europe. The discussion addressed several elements of this crucial initiative, most importantly the ultimate goal of the RFC and their governance structure.

In order to contribute to the more general objectives of the 2011 Transport White Paper of revitalising the European rail freight sector the RFC reinforce the cooperation among infrastructure managers in order to increase the efficiency of cross border traffic. In the discussions there were many examples that showed that such cooperation still faces many obstacles.

The RFC are in principle governed by an Executive Board in which the different infrastructure managers along the Corridor are represented. Capacity allocation is handled by Corridor One Stop Shops (C-OSS). These allow capacity allocation along the entire corridor where once the request had to be made for each leg of a track. Currently there is need to further develop the OSSs, which face several inconsistencies.

The entire RFC-network should be operational by 2015, and 6 RFC have become operational in 2013. Yet it was pointed out that the RFC are only at the starting point of their development.

It was mentioned that the mixed experiences with the RFC were natural in their development as they were meant to "leave room for experimentation" with different ideas and approaches. By now, however, a wide range of experience has been collected, and there is knowledge about what works and what does not. Discussions at the Forum also showed that there is a good awareness of the existing problems. Consequently it is now time to take the RFC approach to the next level and move from an experimenting phase to a "certification phase" in which working approaches have to be recognised by everyone. In this process it may be necessary to allow more top-down interventions. So far the RFC were based entirely on voluntary cooperation. While this was overall successful the need to agree on many technical details unanimously slows down the process. Given the complexity of different rules along the RFC there will be need for an authoritative stance from an actor with a system perspective. This will become even more important for the next step in which the RFC should turn into a true fully interoperable European network.

2. How to achieve modernisation and interoperability of the European rail freight network?

The second part of the discussion analysed several problems in achieving modernisation and interoperability. It addressed the necessary changes from the point of view of the rail freight companies as well as the important example of intermodal freight terminals.

The role of rail freight companies

Rail freight operators are crucial players in the process of establishing a European rail freight network. The Forum pointed out many remaining barriers for operators. Most importantly the competition from the road sector is worrying. In spite of the long standing goal of achieving a better pricing regime for transport infrastructures in the EU, there has been very little success on the aim of internalising external cost. Looking at the cost development in both sectors shows that prices for rail rise more steeply than for road. The weak outcome of the Eurovingette directive is especially worrying for rail freight companies in this regard. Some expressed their hope that the current Commission will push this issue forward with more courage than the previous Commission.

For rail freight companies investing in intermodality creates cost, and the future gains of investments into for instance interoperable rolling stock cannot be guaranteed. This is why rail freight companies are very supportive on pushing forward initiatives to harmonise rules, such as safety requirements. Many other long standing problems are still an issue today. On the case of Austria and Hungary it was demonstrated how different signalling systems still create huge delays even though the incumbent operator in both countries is the same rail freight company. Language requirements for train drivers are a huge obstacle for freight trains for instance when passing from the Netherlands to Italy. On those routes that cross several internal EU borders a variety of other problems are still present such as a special noise reduction requirements for wagons, additional requirements for training of drivers, and special train control systems. Another obstacle that was frequently mentioned is maximum allowed train length: currently trains are limited to the allowed maximum train length along their route, yet productivity could be increased if longer trains were allowed..

How to tackle these issues?

Among other things it was called for a stronger support by national authorities to make longer freight trains possible in practice. In some countries longer trains are theoretically already allowed yet the slot allocation procedures of the infrastructure manager renders it impossible for trains above a certain length to use certain paths.

With regard to priority rules many operators wished to see a stronger preference for the freight sector on the side of the infrastructure managers.

Different views were expressed on the organisation of rail freight companies. The fact that the recast directive demands stronger separation between infrastructure managers and freight companies were considered counterproductive by some. In fact a closer coordination between the network management and operators is needed. Contrary to this view there was also a call for a stronger separation of the two in order to support the development of the rail freight business. Instead of exercising control over the system rail freight operators need to become customer focussed businesses.

Many at the Forum expressed their support for a single European safety certificate and a stronger role of the European Railway Agency (ERA).

Modernisation and digitalisation

Some operators fear that the trend for automation and driverless vehicles will make the lorries even more competitive in the future thus making it harder for rail freight to compete. Others, meanwhile, saw this development as an opportunity as the rail sector was actually more suitable to benefit from automation than the road sector. Automation is a key future challenge that railway regulation needs to address in a way that the sector can benefit from it. This should happen in the context of the European Train Control System (ETCS).

Digitalisation was another prominent issue in the discussion. The increasing role of data illustrates the need to rethink approaches within institutions of the rail freight system. Available data needs to be made available and needs to be shared. This concerns infrastructure managers and railway undertakings. Applying a more open approach to data can significantly help to make the system more efficient.

Another important element discussed at the Forum was the fact that digital tools can be used to make the rail freight sector more attractive to customers. Following the example of other industries the freight sector needs to develop new and better interfaces to become more customer oriented.

Last mile infrastructure and intermodal terminals

The issue of the last mile infrastructure was largely addressed in the discussion. There is especially the need to improve infrastructure surrounding intermodal hubs.

The example was made that intermodal terminals could in some cases very significantly raise their throughput if on time arrival of trains could be guaranteed. Such improvements would not require further investments by the terminals themselves and could in theory easily be achieved. Investments are however needed, and it was mentioned that the funds from Connecting Europe Facility (CEF) should continue to dedicate an important fraction to last mile infrastructure. These investments should be upheld also in light of the new fund for strategic investments (EFSI – "Junker Plan").

On the case of Sweden it was demonstrated that with a business oriented approach and a reliable surrounding infrastructure there is room for more investments and an increase in intermodal freight transport at a profit for the terminal operators.

3. How to increase capacity and usage of the network? The development of RFC

Several aspects of the RFC were discussed during the last session of the Forum. Discussions have shown the advantages but also the limits of the RFC. Overall it is clear that the legal framework of the RFC needs to be clarified so regulators and operators can plan better. Yet also the governance needs to move towards a true European network management.

The RFC have a set of competences in capacity management. Two bodies govern the decision of the RFC. The executive board composed of the Member States' ministries and the management board composed of the infrastructure managers and the allocation bodies. These bodies carry out most of the operational management and are advised by several advisory groups. The C-OSS are in charge of the daily business of path allocation. They are supervised by the executive board. Overall the RFC supported a positive development and are delivering results in terms of higher usages of the paths along the corridors. Among the most urgent issues for their optimisation, the

Rail freight in Europe: a necessary evolution

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The objective to increase the relevance of rail in freight transport in Europe is widely shared. However, national railway systems have to evolve to benefit of a more prominent role in freight transport. National railway systems have to overcome i) the national structure; ii) the traditional rigidities.

On the one hand, the Single European Railway Area (SERA) is necessary to fully benefit of the competitiveness of railway transport in longer distances. It is a well-known fact that rail freight transport is particularly competitive in longer distances, while road transportation is more competitive in shorter distances. Fragmented national rail systems are not in the position to exploit this competitive advantage over road transport. Therefore, the SERA could significantly expand the role of railways is freight transportation.

However, it is a fact that it is not simple or inexpensive to move towards a SERA. Interoperability was early identified as a necessary, but expensive, condition for the emergence of the SERA, and everyone understood its long-term benefits. But on the shorter-term, interoperability generates significant costs and little rewards.

The creation of Rail Freight Corridors (RFC), as in Regulation 913/2010, seems an effective strategy to improve the interoperability of networks. A corridor approach allows making effective short term benefits in the denser routes. It allows also to experiment with different solutions (creating somehow competition between the different corridors). It allows identifying bottlenecks, so that both EU and national authorities can better direct investment to eliminate them.

For instance, disputes in the framework of the corridors management might be an effective tool to identify bottlenecks in transnational railway transport. A detailed analysis of such disputes might provide an interesting insight for the development of a more integrated system.

A prove of the success of the corridors approach might be the shared opinion that the system has to evolve to coordinate the interoperability in the different corridors. A Network of Corridors is requested, as obviously, most traffic is not limited to a single corridor. But such a request is a clear sign that Corridors are effectively facilitating cross-border transport and that such a result is desired at a broader scale.

On the other hand, growth is only possible if railway transport is in the position to attract new cargo. Globalization has significantly modified demand in the transport industries in Europe. Heavy industry has lost relevance in Europe, and as a consequence, some of the traditionally more relevant cargos in the freight railway system (coal, steel, etc.) have been reduced in amount. In parallel, new trends have emerged: arrival of terminated products from Asia, demand for more reliability, more flexibility, etc.

It is widely understood that inter-modality has to be strengthened. Railways cannot operate as a closed system. Railways have to interact as efficiently as possible with other transport modes in order to be fully integrated in the logistic chain.

It is necessary to adapt the infrastructure to the new conditions. It is important to plan the evolution of the network in order to meet new challenges. Railways have to reach harbors in proper conditions. Terminals in metropolitan areas have to be developed in order to seamless operate with road transport.

Railways have to interact with long distance maritime transport. As globalization has increased interoceanic traffic, railways have to increase the interoperability in interoceanic harbors in order to be relevant in the transport of terminated products arriving mostly from Asia.

Railways have to interact with short distance road transport. Railways have to become more relevant in the transport of terminated products for the final consumer. Road transport is necessary for the last kilometers, but the role of railways would increase with seamless interoperability with road transport as close as possible to the final consumers. Efficient inter-modal terminals are necessary for such seamless operation. The role of competition in the management of terminals has to be considered.

problem of legal clarity was pointed out. The executive boards set up a framework for capacity allocation. This is the basis for capacity allocation decisions of the C-OSS. Yet the legal status of the framework is unclear. Under European law it is defined as an implementing measure. There are however also national laws on capacity allocation which makes it difficult for the C-OSS to defend decisions once they are challenged in court. The problem is likely to grow as the RFC are becoming more important.

The OSSs furthermore play an important role in data collection: it was pointed out that one of the crucial features is the collection of data in order to improve the bases for Key Performance Indicators (KPI) that should be used more extensively in the future. Some pointed out that as in other sectors certain KPIs should become mandatory also in the rail freight sector. For an intermediate period there could also be a competitive element between the RFC: whichever corridor manages to achieve the best performance could be taken as a model for the regulation of the future network.

Many examples presented at the Forum showed that there is still plenty of low hanging fruit: improvements that can easily be achieved with little effort should be treated with priority. An example for this is short distance interoperability. Better coordination with other initiatives, most importantly ERTMS deployment, is also crucial.

In order to deal with the challenge of establishing a RFC-network some elements of the governance structure would need to be improved. There has been wide agreement that it is important to give further competences to ERA. It was also stated by many that there is need for a European Network Statement. Currently there are national network statements, yet the existing "corridor statements" for the RFC could be further developed into a European Network Statement.

To address the governance challenge of coordinating the infrastructure management there was the proposal for a pan European institution similar to Eurocontrol (in charge of the network management of Air Traffic Control in Europe) for the rail sector. Such an institution would look after the application of rules, put pressure on laggards and thereby discipline the system.

Opportunities and threats for intermodal rail freight transport and hinterland connections in Belgium: capacity questions

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In order to reach the 30% shift of road transport over 300 km towards rail and inland waterways by 2030 stated in the 2011 White Paper on transport, the Commission is anticipating on the development of the European Single Transport Area (SETA), with optimal connections and nine fixed rail freight corridors. As such, with the creation of a unified market, costs could be reduced and sustainability of transport in Europe can be increased. In the case of Belgium, three of these rail corridors are connected to the Belgian rail network, all linked with the Port of Antwerp and its extensive hinterland. It is the goal of the Belgian infrastructure manager to have all infrastructure on Belgian territory in accordance with the criteria of the European framework by 2030.

Nevertheless, over the last few decades, capacity on the rail network has been decreasing. Schwab et al. (2014) illustrate that most gateways and corridor infrastructure in Belgium could not handle an increase in volumes of 50%, which puts a burden on realising the above mentioned objectives. Although the Belgian railway network is over 3,500 km long, holding one of the highest densities within the European Union, many rail connections have been abandoned or even (continue to be) dismantled over the past decades (Vannieuwenhuyse et al., 2006).

In addition, the rail freight industry has to deal with another threat. Passenger and freight transport have to use the same rail network, often interfering and pressuring the different schedules. Currently passenger trains, even when delayed, still receive priority over freight trains, which negatively impacts the necessary flexibility and efficiency (Crozet et al., 2014). So far, no trend has been perceived to change this regulation in favour of freight transport. This would also imply that sufficient capacity and side-tracks are to be available to park delayed trains. As passenger rail transport is also often perceived as a sustainable way of commuter transportation, it can be expected that for a small country such as Belgium, where road congestion is already at a high level, the number of passenger trains and the use of the network for this mode of transport will continue its increase. This will put an additional burden on the available network capacity in the future.

The creation of the a European rail network is not only necessary to meet with the rising demands for rail transportation, measured in absolute rail ton-kilometers and passenger-kilometers, but also to capture the market opportunities in Eastern Europe. The current dominance of Western Europe will be increasingly challenged by possible hubs such as Prague or Bratislava, which will increase the importance of connecting the different corners of Europe, in order for intermodal transport to become a flexible, attractive and efficient alternative mode of transport.

In terms of rolling stock fleet capacity, long life-cycles have slowed down the process of standardization and innovation. Therefore, the upgrade of the European fleet and rail network should be executed with the goal of increasing interoperability across the European continent (Mitusch et al., 2014). As more rolling stock will be necessary, new technology can be gradually introduced, bringing great opportunities for intermodal transport to become more attractive and lower access barriers. Possible cooperation with the different modes of transport, mainly road transport to execute pre- and post-haulages, should be taken into account. A flexible transhipment from one mode to another is crucial for intermodal transport to become a success-story. Besides the rolling stock, standardization and interoperability are also crucial for the rail network itself. As the speed and length of the train are directly correlated with the network capacity, these technical innovations are to have a positive impact. Also IT developments will play a crucial role in this evolution.

Last but not least, a great opportunity for intermodal transport related to capacity lies in the consolidation of flows. Container transport by rail needs a certain distance in order to become attractive. In this sense, the development of the earlier mentioned European corridors will strengthen the position of intermodal rail freight, supported by the increased bundling possibilities, once the different origin and delivery points become connected to the European rail network (Crozet et al., 2014). Nevertheless, a number of threats remain and caution should be taken when forecasting the future of intermodal rail transport in Belgium and Europe. Consolidation of flows requires a shift in the mentality of shippers, cooperation with competitors and a certain believe that rail transport can be the better option. Also the current climate of savings and budget cuts, might lead to the cancellation or delay of certain important capacity investments, resulting in an increasing number of bottlenecks and a decreasing level of service.

List of references

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Mitusch, K., Liedtke, G., Guihery, L., and Balz, D. (2014). The structure of freight flows in Europe and its implications for EU railway freight policy. EconPapers 61. Working Paper Series in Economics, Karlsruher Institut fur Technologie (KIT).

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Further readings

Bälz, David et al, 2014, The structure of freight flows in Europe and its implications for EU railway freight policy, Karlsruher Institut für Technologie

This paper analyses the potential for shifting freight transport to the railways in Western and Central Europe. This potential arises for large and concentrated freight flows over long distances of about 300 km or more. The paper shows that there are only few such freight flows in Europe, and that they are concentrated or connected to the central European population centres, sometimes called the "Blue Banana". As a consequence, the European rail freight corridors according to EU Regulation 913/2010 should be divided into two distinct groups: first tier and second tier corridors, and substantial innovations should be introduced on the first tier corridors first, in order to increase efficiency and reduce noise. r

Crozet, Yves, 2014, Development of rail freight in Europe: What regulation can and cannot do, CERRE Policy Paper

The first part of this paper looks at the rail freight sector, presenting demand evolution and supply responses. Although rail transport is faced with a demand that is not very dynamic and strong and unbalanced intermodal competition, it has managed to stabilise and in some cases even expand its market share. Market opening and intermodal competition have played a key role in changing trends and considerable organisational changes within companies. But the market structure is still characterised by a strong concentration. Now that the liberalisation process has been developed quite extensively, what are the next steps for the regulation of rail freight? The second part of this paper comes forward with some possible options, developed on the basis of, among others, an assessment of how competition takes place in practice in this very capital-intensive industry, characterised by numerous barriers to entry.

Prodan, Aleksandr, Infrastructure Charging Difference in International Passenger High-Speed and Freight Corridors: Towards an International Railway Market in Europe?

EU Regulation 913/2010 established a set of nine freight corridors, with the goal of increasing the amount of freight transported by rail within the European Union. Using previous analysis of infrastructure charging systems, this paper examines how well they work over a set of nine freight and three high-speed passenger corridors. System structure and compatibility from country-to-country are examined, and charging levels between countries are compared. The paper finds that existing systems do not work together cohesively, and that from an infrastructure charging's point of view, international corridors do not exist in practice. Due to differences in cost recovery goals between different countries, charging levels tend to vary, with special infrastructure projects costing more than ordinary lines. Lack of cohesive corridor policy with regard to infrastructure charges is preventing the creation of a single European market for both transporting freight and for improving high-speed passenger service.

Florence School of Regulation Transport Area, 2015, 10th European Rail Transport Regulation Summary "Rail Freight in Europe: How to Improve Capacity and Usage of the Network"

This document summarises the content of the presentations delivered during the 10th Florence Rail Forum, offering short summaries of each presentation, and illustrating the main points made and matters treated. The panels featured regulators, operators, infrastructure managers and various other stakeholders. Discussions focussed on achieving modernization and interoperability and the European Strategy for Rail Freight.
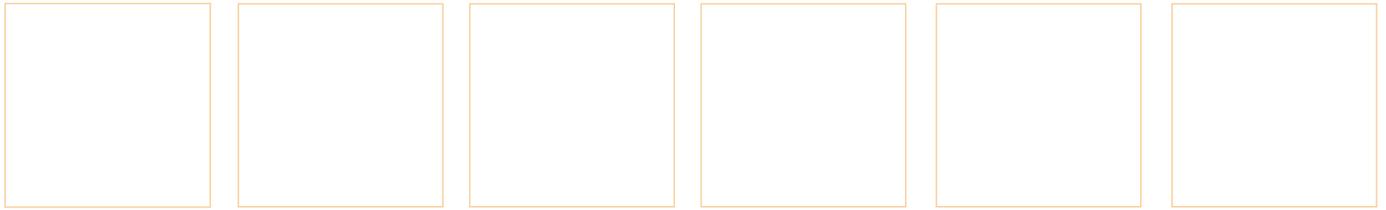
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The FSR-Transport Area's main activities are the Florence Transport Forums, which address policy and regulatory topics in different transport sectors (Rail, Air, Urban, Maritime, Intermodal transport and Postal and delivery services). They bring relevant stakeholders together to analyse and reflect upon the latest developments and important regulatory issues in the European transport sector. These Forums inspire the comments gathered in this European Transport Regulation Observer.

Complete information on our activities can be found online at: *fsr.eui.eu*