



Bulletin

20th Anniversary of the Vilnius Protocol

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Editorial

In 1999, OTIF's 5th General Assembly was held in Vilnius, Lithuania. It adopted a protocol - the Vilnius Protocol - which was to constitute a major milestone for OTIF and the development of international railway law. 20 years later, on 29 October 2019, OTIF, together with the Lithuanian Ministry of Transport and Communications, the Lithuanian Ministry of Foreign Affairs and Lithuanian Railways, jointly organised a symposium in Vilnius on the "20th Anniversary of the Vilnius Protocol: OTIF's achievements and prospects".

The symposium opened with speeches by Mr Gytis Mažeika, the Republic of Lithuania's Deputy Minister of Transport and Communications, Mr Adamas Ilkevičius, Deputy CEO of JSC (Lithuanian Railways), Mr Michel Burgmann, former Director General of OCTI and Mr Wolfgang Küpper, Secretary General of OTIF. Participants, speakers and moderators then began the detailed work of the symposium.

Sessions 1 and 3 dealt with future challenges and objectives in terms of achieving the efficient organisation of international rail traffic from the point of view of technical regulations, contract law and the provisions concerning dangerous goods.

The discussion in session 2 focused on the fragmentation of international law in general and railway law in particular, and on the quality of the international regulations and their practical implementation.

There were meaningful discussions throughout the day for the speakers and participants who were present in the conference room. The quality of the debate was very high. The symposium was a successful anniversary to mark the Vilnius Protocol.

With this special edition of the Bulletin, the Secretariat's aim is to preserve a written record of the speeches in addition to the [videos](#). Thanks to the contributions from most of the speakers, this special edition provides a record of the discussions on 29 October 2019 and offers solutions that can be considered for a promising future.

I hope you enjoy reading this special edition.

Authors:

- Caroline Bailleux
- Cesare Brand
- Maurizio Castelletti
- Christian Chavanel
- Josef Doppelbauer
- Jean-Georges Heintz
- Elisabeth Hochhold
- Wolfgang Küpper
- Christophe Le Borgne
- Clio Liégeois
- Joost Naessens
- Dr. Vytautas Naudužas
- Dr. Péter Rónai
- Ralf-Charley Schultze

SESSION 1

Evolution of international railway market: challenges and objectives for technical and dangerous goods regulations



Josef **DOPPELBAUER**
ERA Executive Director



Christian **CHAVANEL**
UIC Director of Rail System



Joost **NAESSENS**
CEFIC Director Transport & Logistics

Track Free for a Greener Europe - the European Green Deal and the Role of Railways

When travelling by car between European countries, it is not an uncommon experience that the quality of the motorway surface degrades more or less significantly on the final leg connecting two countries. There are exceptions to that rule, but in general those roads leading to another country seem ever so slightly less frequently maintained – probably because it is every good politician's job to take care of their own constituency first, and concentrate resources and attention on the core national network before taking care of the less voter-relevant international connection. This is not a big issue for international road travel, because generally the conditions of the connecting bits and pieces on the intra-European motorway system are quite sound, and there are no technical or administrative hurdles for car travellers moving between European countries. Crossing borders by car is blissfully uncomplicated.

Crossing borders by rail is an entirely different matter. The issues are diverse and manifold, from operational to administrative: starting from differing technical environments, with different electrical currents, track gauges etc., via different operational and safety rules and language requirements, up to different national certification and authorisation processes - these differences have so far made it very difficult to cross an international border by rail.

In the past decades, political decision-makers have had little incentive to change that situation – rail was just not an issue that scored points with voters. Aviation was the transport mode that connected people globally, ships

and trucks offered a cheap, safe, and reliable way to fuel the global economy, and the private car provided citizens with seemingly endless options of individual movement. Despite considerable technical advancements, rail only played a marginal role in the third industrial age of globalisation, which started in the late sixties and came to an end only a few years ago. As a result, the rail network in Europe remains highly fragmented, more than 60 years after signing the Treaty of Rome.

However, the fourth industrial age – the emergence of which we are witnessing today – brings with it huge opportunities for the revitalisation of railways. People today are looking to reduce the carbon footprint of their travels, and are more than ever ready to change behaviour. As an environmentally friendly mode of transport, railways can once again become the most relevant mode of land transport - as part of an integrated multimodal transport chain for passengers and freight. As for the EU, the European Green Deal proposed by the European Commission clearly expresses the new zeitgeist at political level, and it raises the stakes for the transport sector by setting some ambitious targets. For example, the goal of making the European continent climate neutral by the year 2050 – and rail is to play a central role in attaining this target.

HUGE POTENTIAL FOR RENEWED SUCCESS - AND FAILURE - OF RAIL TRANSPORT

Expectations are high as the public profile of rail transport is on the rise – and so is the potential for failure. As the trains fill up

on Europe's major routes with a new cohort of environmentally-conscious travellers, the natural limits of the current rail system come to light. The success of rail transport in Europe is still held back by a fragmented network, and, consequently, expensive operations. National small-time thinking and planning hinder the true internationalisation of rail transport. As in international aviation, standardised products and international technical and operational rules would lead to drastic cost reductions, and hence to a much better service and price offering on behalf of the rail industry.

Taking the cost out of the system is one of the big challenges – becoming more innovative is another. In order to compete effectively with road transport, we need to create an environment in which innovation can be swiftly absorbed, so the quality of service is increased. Rail freight operators, for example, urgently need to increase their productivity, reliability, and flexibility in order to compete with road transport. Absorbing “soft” innovation is key here – innovation that does not affect the current physical or operational infrastructure, but rather upgrades it thanks to digital innovation. The quicker they are in absorbing new technologies, the sooner they will have solved existing issues and will be in a position to offer a competitive product. The road sector is our benchmark - we want to make our product so good that people will choose rail over road transport again. The rail sector has to deliver on three dimensions in order to win back customers:

1. **Better connectivity – closing missing links on the international rail network and**

drastically reducing technical and operational barriers

2. **Increased frequency of service – all too often there are large gaps in the daily schedules**
3. **Reduced travel times – in order to compete with road and aviation, a faster service has to be provided for key connections. In some cases, night trains may be a viable alternative**

ROLE OF LEAN REGULATION AND INTERNATIONAL COLLABORATION

Railways are the only mode of transport without a global set of binding rules. The international rail world is therefore colourful and full of technically interesting variants and solutions. From a purely business point of view, however, we should strive for a common set of technical and operational rules, which allow for full compatibility of products and

economies of scale. At the European Union Agency for Railways, it is therefore our ambition to produce a simplified set of rules that can be globally applied, while at the same time ensuring safe and interoperable operations. Our ambition is to be a driving force for the globalisation of railways, together with our partners around the globe who follow the same ambition.

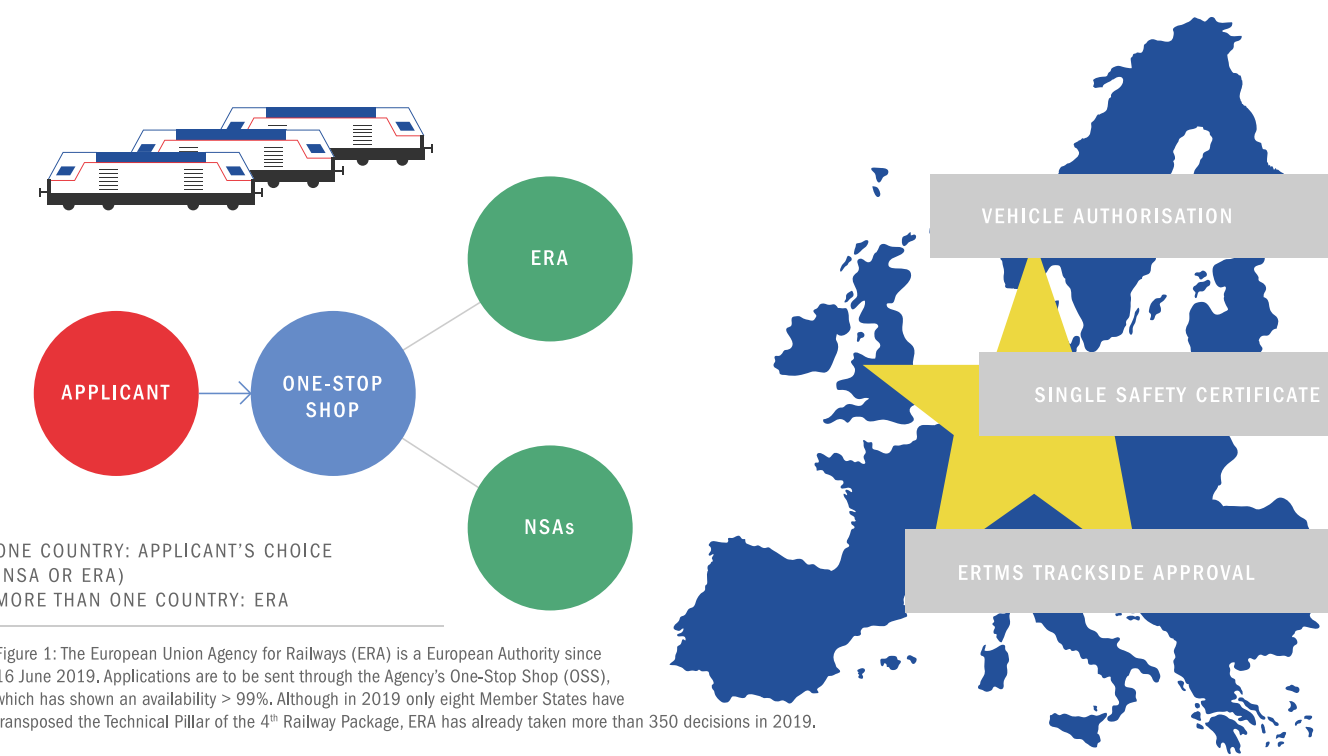
National thinking serves neither the purpose of international railways, nor that of the New Green Deal - as is outlined in its strategy document, the drivers of climate change are global and not limited by national borders, and it will take a concerted international effort to deliver a greener world for everybody. Rail freight, especially coming from neighbouring countries and regions close to the European continent, will play an integral part in organising carbon-neutral logistics that facilitate trade with our closest partners and allies. The role of OTIF as an intergovernmental organisation for international carriage by rail therefore plays a vital role in harmonising the

wider European rail market, and in creating links to the economies close to the European continent.

ROLE OF ERA AS REGULATOR AND SYSTEM AUTHORITY

The European Union Agency for Railways (ERA) has assumed a new role with the technical pillar of the so-called 4th Railway Package as the European authority issuing single safety certificates, vehicle (type) authorisations and ERTMS trackside approvals that are valid in multiple European countries. The legislation entered into force in mid-2019, so the focus of Agency staff in previous years was to prepare to assume the new tasks. We have developed an IT system to handle requests for authorisation EU-wide and in all official EU languages, the one-stop shop (OSS).

We had to re-organise the structure of the Agency to cater for the new tasks, and hire new high-calibre staff to perform the new duties, again covering all languages spoken in the



EU. We adopted a new corporate culture of responsiveness and agility in order to meet short legal deadlines for decisions, and get prepared for different crisis scenarios in which we guarantee business continuity. We signed cooperation agreements with National Safety Authorities (NSAs) in the EU to organise our collaboration at working level – and created the “pool of experts”, with experts from NSAs working on behalf of ERA in order to fulfil our new functions at all times and in all languages. In short, ERA as an organisation underwent a fundamental change at organisational, cultural, and operational level – and it could not have happened and would not work without a substantial degree of international collaboration, both with national agencies and the European rail sector.

Building consensus internally and externally, with such a multitude of different organisations, was at times challenging – and looking at the feedback after only 6 months into the operation, we can say it was worth it. The OSS (see Figure 1) provides a new level of transparency for the processes in question, and it streamlines the EU system beyond its operational limits, as the processes feeding into it now follow the same logic and structure for all actors. At the same time, the regulatory framework is more useful and of higher quality. For example, the register of vehicle types was not maintained consistently by the National Safety Authorities (NSAs), because there was no real need to do so, whereas it is a pre-condition for us. Now, prior to issuing an authorisation, we must ensure the register is updated. Likewise, notified bodies (NoBos) are filling in the database of certificates more consistently. Additionally, ERA staff dealing with the new processes, having first-hand contact with customers from the EU rail sector, are now in a position to give feedback to those colleagues

in charge of developing Technical Specifications for Interoperability (TSIs). The new processes not only deepen EU-wide harmonisation, they also improve the relationship between the sector and the regulator. Just as good international collaboration is vital in order to close the gaps in the rail system, it is also vital in terms of creating a common set of processes and rules.

SAFETY – THE VITAL PRE-CONDITION FOR ANY SUCCESSFUL BUSINESS

When defining any future role for railways, safety will be the cornerstone for any successful business. The safety level of rail transport in Europe has improved at an impressive rate over the past decades, thanks mainly to advances in safety-related technology. Yet we are still experiencing catastrophic accidents in modern rail history. Moreover, in almost all of the recent major accidents on the European rail system, human and organisational factors played a significant role. The Agency is therefore promoting a harmonised safety management system (SMS) for Europe, coupled with a positive safety culture. It is recognised practice in many high-risk domains to tackle organisational and cultural aspects in order to enhance safety levels. The success of safety culture in those industries has convinced leaders of the European rail sector, as well as European law-makers, to embrace this philosophy across the EU. ERA has created a safety culture model, and based on that, and with the support of the European Commissioner for Transport, ERA has developed the European railway safety culture declaration. The declaration lays down the four railway safety fundamentals:

1. Manage major railway

- risks with anticipation and resilience;**
- 2. Understand workplace reality;**
- 3. Cultivate a continuous learning environment;**
- 4. Integrate safety into business at all levels.**

Both formal (SMS, technology etc.) and informal (leadership, culture etc.) elements of safety management need to be addressed jointly in order to create sustainable and safe performance in the EU. Unfortunately, there is still a wide divergence in different parts of the European railway system with some countries performing exceptionally well, and others still far below average. The Agency is committed to tackling these differences by engaging in different promotional activities that cater to the target country. Recently, our focus has shifted from purely proposing legislation to actual support activities for stakeholders – as a result of which we are glad to announce that more than 150 leaders from across the European rail sector have signed the European railway safety culture declaration.

ERTMS – THE BACKBONE OF RAIL DIGITALISATION AND INTEROPERABLE TRANSPORT

The issue of train protection and traffic control in Europe deserves special attention, as there, the fragmentation of the European rail system is particularly developed and hence is a major obstacle to the development of international rail traffic. The standardisation of the numerous systems currently coexisting in the European Rail Traffic Management System (ERTMS), in addition to facilitating cross-border traffic, should give a strong impetus to

the European market to reduce costs and improve the quality of rail equipment. When building the future European rail traffic management system, however, a key factor will be modularity: we need a more modular structure for ERTMS. At the same time, we must maintain the progress achieved, particularly with regard to the stability and compatibility of ERTMS, and allow for the integration of the future game changers, such as the Future Rail Mobile Communication System (FRMCS), ATO and ETCS Level 3.

At the beginning of 2016, ERA published a so-called strategic roadmap for the medium-term integration of new functions into ERTMS, such as a new radio system to replace GSM-R. This roadmap is based on the principle of strict compatibility - new functions can only be introduced based on and compatible with

existing functions. In its role as system authority, ERA will introduce strict version management to ensure that there is no further diversification of ERTMS. This task will be supported by the extended role of ERA - the Agency has the right to review the ERTMS specification for new infrastructure projects from the tender phase onwards. The most important next step will be to bring all ERTMS infrastructure components already installed in Europe up to a compatible level. If all track-side installations are strictly within the specification framework, then a fully compatible on-board unit can run under ERTMS on ALL of these lines.

The new digital age also brings with it new challenges for the railway system, for instance cyber security - we have to be careful here, while bringing down physical barriers, not to start creating new digital ones,

with national specific responses to cyber threats.

In conclusion, the increased awareness of climate change and the role of transport in it have created a strong tailwind for rail as an environmentally friendly, sustainable mode of transport. In order to enable a significant shift of transport volume, e.g. from road to rail, the technical and regulatory fragmentation of the European railway system needs to be harnessed, and the cost of rail operation has to be reduced. With its new mandate, ERA strives to contribute to both aspects.

Josef Doppelbauer

Development of the international railway market challenges and objectives for the technical regulations and dangerous goods provisions

For a number of years, UIC has been contributing to the development of the regulations concerning dangerous goods by taking part in the work of the European and international bodies in charge of transporting such goods. Among these bodies, OTIF plays a key role, as it is responsible for the “Regulation concerning the International Carriage of Dangerous Goods by **Rail**”, known as **RID**¹.

After a brief presentation of UIC and its “added value” in this area, this article sets out UIC’s view on the following issues:

- The regulatory and technical context of the transport of dangerous goods;
- Requirements in terms of harmonisation and consistency between the various railway regulations and with the other land transport modes;
- Lastly, some avenues for possible and desirable improvements.

UIC AND ITS ADDED VALUE FOR OTIF WITH REGARD TO THE CARRIAGE OF DANGEROUS GOODS BY RAIL

UIC has a history going back almost one hundred years in the service of railway operators in respect of international cooperation between railways. It is a global railway organisation which now has 200 members

spread over 95 countries on every continent. Each year, these members rack up 3,000 billion passenger kilometres, 10,000 billion tonne kilometres over 1 million kilometres of railway lines and employ 7 million people. **UIC’s strategic objectives as a professional organisation** are to promote rail transport at global level, to develop further as a technical platform serving its members, to develop joint projects on innovations and to promote sustainable, carbon-free transport together with its various partners.

With regard to Europe, the institutional organisation of rail transport has changed a great deal over the last twenty years. Since it was set up though, UIC has cooperated actively with OTIF. Its strategic objectives are such that they can **support OTIF’s ambitions in terms of international rail transport** in general and in **the transport of dangerous goods** in particular. Another of UIC’s advantages is the cooperation and partnerships it has formed with around a hundred other governmental, intergovernmental, technical, standardisation and financial organisations, etc. Notable examples of UIC’s partnerships include those it has with a view to developing the Euro-Asian freight corridors and UIC’s work on the transport of dangerous goods within various intergovernmental bodies dedicated to the carriage of dangerous goods, particularly those attached to the European Commission, the United Nations Economic Commission for Europe

(UNECE) and OTIF. UIC also has the status of an NGO accredited to the United Nations Organisation (UN) and OTIF.

REGULATORY AND TECHNICAL CONTEXT OF THE TRANSPORT OF DANGEROUS GOODS

The regulatory and technical context of the transport of dangerous goods is dynamic and complex. New dangerous goods are placed on the market and there are increasingly demanding societal constraints on transporting them, although these vary to some extent depending on the region and country. Among these constraints, safety and security also depend on regulations and standards from areas outside the scope of COTIF. Without claiming to be exhaustive:

- The technical provisions for the carriage of dangerous goods by rail (modal and intermodal) fall under both general railway regulations and the regulations specific to the carriage of dangerous goods.
- When rail transport involves intermodal interactions, the technical railway regulations must meet the requirements of harmonisation and consistency with the regulations for the other modes of transport (road, inland waterways, maritime and air).
- The quality of technical documentation, particularly when it is linked directly to

the operation of rolling stock and train movements, is a prerequisite for the market to function properly. It is easier to achieve the smooth flow of traffic when there is a good level of harmonisation between the technical provisions and consistency between the various regulations underpinning this flow, whether it is national or international.

- With regard to the transport of dangerous goods, the rail sector has a set of specific international regulations within the scope of application of COTIF, known as “RID”. This also covers to all transport within the European Union (EU) in accordance with European Directive 2008/68/EC, annex II.1 of which is RID².
- From the 1990s onwards, the EU decided to meet the needs of the market simply and effectively by carrying over the international regulations to its territory for transport by rail, road and inland waterways.
- There is systematic work to harmonise the transport of dangerous goods regulations between the regulations for the land transport modes in Europe. The work on harmonising the modes is carried out in joint UNECE and OTIF bodies (RID/ADR³/ADN⁴ Joint Meeting and its working groups). They take account

of the UN Recommendations (Model Regulations), whose aim is to enable the carriage of dangerous goods throughout the world.

- Lastly, the COTIF and OSJD regulations⁵ are also being harmonised and made consistent by the OTIF Member States and the members of OSJD.

However, railway operations, particularly the transport of dangerous goods, are subject to other regulations (civil safety, environmental protection, security), **which are more or less restrictive, depending on the state:**

- For example, some states add their own laws on the prevention of major risks, because the transport of dangerous goods is considered to be a source of major risks for these states. The problems raised are therefore not so much the result of difficulties of harmonisation and consistency, but of safety concepts which differ, or are even irreconcilable, between states.
- Moreover, the regulations have evolved (RID and Directive 2008/68/EC)⁶, and in the process have enabled each state to decide to impose “transport restrictions” or to take “additional measures” to those prescribed in the railway

regulations (route restrictions; particular operating conditions, such as reduced speed, fixed journey time, prohibition on passing; measures to be taken in exceptional circumstances). These measures have to be subject to a risk analysis and the competent authority has to prove that they are necessary. In some cases, these regulatory changes have enabled national provisions to be enshrined which are sometimes very old, such as so-called barrier wagons, train composition rules, prohibition of hump shunting, etc.

- There are also new concerns in terms of security. At the beginning of the millennium, new provisions were introduced as a result of the existence of high risk dangerous goods. High risk dangerous goods mean dangerous substances which, if diverted from their initial destination and misused for terrorist purposes, can cause serious damage, great loss of human life or massive destruction. While these new provisions were defined in the UN Recommendations, it is the prerogative of states to implement them. As a result, railway undertakings are confronted with the very variable application of these UN Recommendations by states and checks by the competent authorities. This does not help the market function at its best.

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008L0068&from=FR>
³ Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
⁴ Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).
⁵ OSJD = Organisation for Cooperation between Railways
⁶ RID: Chapter 1.9 of the Annex to Appendix C to COTIF in accordance with Article 6 “Restrictions on carriage imposed by the competent authorities” http://otif.org/fileadmin/new/3-Reference-Text/3B-RID/RID_2019_E_05_February_2020.pdf
Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods – Article 5 “Restrictions on grounds of transport safety”
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008L0068&from=FR>

¹ The Regulation concerning the International Carriage of Dangerous Goods by Rail (RID), forming Appendix C to COTIF and its Annex

REQUIREMENTS
IN TERMS OF
HARMONISATION
AND CONSISTENCY
BETWEEN THE VARIOUS
REGULATIONS

It is therefore evident that **the carriage of dangerous goods by rail is facing numerous constraints, which are sometimes an obstacle to the principle of the free, safe movement of trains under acceptable economic and technical conditions.**

The requirements in terms of harmonisation and consistency between regulations are not new. The first international regulation on the carriage of dangerous goods dates from the end of the 19th century and had fewer than 10 pages. The current RID now has more than 1,100 pages. However, the requirements in terms of harmonisation and consistency **have changed greatly** owing to the great increase in Europe of sources of production and technical documentation (including the regulations which, in principle, are their source) and owing to the growing number of institutional actors in the rail system.

AVENUES FOR
IMPROVEMENT

Strengthening coordination in the production of transport regulations – not just for dangerous goods, but also at intermodal level – provides the main route to improvement. This coordination exists, but the complexity of activity makes it more difficult, because, as pointed out above, this activity now affects aspects which are not part of

the rail system itself. There are an increasing number of external constraints on rail transport, despite the fact that they are also presented as being opportunities for rail transport to develop. Among these are of course the challenges in relation to climate change, security and safety or protection of the natural and urban environment.

Being aware of the difficulties linked to safety and the free movement of dangerous goods trains in Europe, the European Commission, OTIF and UNECE, among others, have, for example, **developed a harmonised multimodal** (rail, road, inland waterways) method of risk assessment. This work, which is being driven by the European Union Agency for Railways is being carried out by dedicated working groups that bring together the competent authorities, national safety authorities, infrastructure managers, railway undertakings, consultants and professional bodies (European Chemical Industry Council - CEFIC, UIC, the International Union of Wagon Keepers - UIP, CER, etc.). Documents concerning the method have been tested and are now public and available on the Agency’s website. This method and its use will now be discussed at the plenary sessions of the international bodies with a view to integrating it into the regulations.

However, **the requirements in terms of harmonisation and consistency also affect aspects of the rail system, particularly:**

- **The coordination of national and international technical provisions**, which can cover:
 - o Railway operations in general;

- o The more specific movement of dangerous goods;
- o And more particularly the carriage of dangerous goods by rail.
- **At the perimeters of application of regulations that might overlap.** The systematic removal of overlaps resulting from institutional organisation is not necessarily a good solution, because it does not do away with the various competent authorities’ legitimate interest in the subject. On the contrary, it is better to deal with overlaps on a case by case basis and to support coordination between competent authorities. OTIF makes a valuable contribution to this through the Joint Coordinating Group of Experts that it has set up.

Significant progress has already been achieved in recent years in terms of dangerous goods transport. However, progress still needs to be made, particularly with regard to:

- The persistence (and sometimes creation) of national provisions or rules which constitute an obstacle to the free movement of goods. In this respect, it would probably be better to concentrate efforts initially on the European and international corridors.
- The transmission of information relating to the goods being carried, including dangerous goods.
- The EU has updated the TSI TAF⁷ in keeping with the project on “telematics

applied to dangerous goods” carried out by OTIF and the UNECE in a multimodal perspective (rail road, inland waterways). The quality and reliability of information relating to dangerous goods is essential for safety and the competitiveness of rail transport in an international perspective. This is also a subject that is covered by the provisions of COTIF.

CONCLUSION

Faced with the increasing constraints in the carriage of dangerous goods, action is being taken to facilitate the free and safe movement of dangerous goods in a multimodal framework under acceptable economic and technical conditions. There is a lot to do, despite the progress that has been made as a result of COTIF, particularly in terms of the better coordination of national and international technical provisions, the unification of national rules,

especially on the European and international corridors, supporting coordination between rule-making bodies and improving the quality and reliability of information relating to dangerous goods.

UIC will continue to collaborate to this end in a spirit of cooperation with all the stakeholders.

Jean-Georges Heintz
Christian Chavanel

⁷ Commission Regulation (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union
<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1585844368509&uri=CELEX:32014R1305>

Towards a sustainable rail freight transport system

A drastic improvement in reliability of rail freight is the basis for a further shift to rail

For many years, the chemical industry has been a strong user and believer in railway transport, as it is a safe and environmentally friendly transport mode. As a mover of large volumes of freight, the chemical industry is not only committed, but is also dependent on making good use of all types of rail transport (ranging from intermodal transport, via block trains through to single wagon transport). Availability of reliable and competitive rail freight services is crucial to the chemical industry's ability to maintain seamless supply chain operations. Therefore, CEFIC shares the ambition of the rail freight sector and of the EU to increase the share of rail freight from currently 18% to 30% by 2030.

Chemical companies have to a large extent already captured current modal shift opportunities, finding it difficult to increase modal shift further without jeopardising service levels. Chemical business decides on the transport mode based on three key criteria: safety, reliability and efficiency. While safety always comes first and is everyone's license to operate, reliability of rail freight is the next most important criteria. Reliability of chemical logistics chains is of crucial importance, with potentially huge consequential losses in case of supply chain disruptions. To seize the potential of rail transport fully, some urgent and important actions are essential.

FREIGHT TRAINS HAVE TO OPERATE ON TIME

Currently, depending on the route, the punctuality of rail freight is only averaging around 50% to 60%, counting freight trains with delays of up to 1 hour on-time.

A MORE EFFECTIVE QUALITY MANAGEMENT SYSTEM

In order to improve the effectiveness of rail freight quality management, a uniform punctuality KPI should be put in place, measuring punctuality end-to-end along the entire rail transport chain. Such measurement must include clear identification of the causes of delay, showing what kind of event or which party has caused certain delays and to what extent. Through analysis of the causes of delay, actions can be undertaken gradually to improve the performance.

Such KPIs should be made available from point-to-point, throughout the rail freight corridor network and beyond (up to the last terminal). It should be made available via an on-line tool or quality dashboard, giving rail customers access to quality data on a monthly rolling basis, showing the development of performance over a 12-18 month rolling time window. As a first step, the available information on train runs in Europe from the RailNetEurope (RNE) train information system should be "freely accessible" to all stakeholders, not only for railway undertakings and infrastructure managers, but also freight forwarders and shippers. This transparency about the quality of rail freight, in particular when showing improvement, will be crucial in terms of re-establishing customers' confidence in rail freight and triggering further modal shift to rail.

THE IMPORTANCE OF HAVING A RELIABLE REVISED EXPECTED TIME OF ARRIVAL

Railway undertakings should

speed-up the integration of IT systems to improve data and information exchange. This is required to enable functionalities such as track and trace, proactive exception alerts and the provision of reliable revised estimated time of arrival (ETA). Such system and data integration must also include the connection of terminals, combined transport operators and logistics service providers, to ensure that proactive exception alerts and information about revised ETA can be made available to reach the shippers of goods and ultimately consignees.

DRIVING A TRAIN SHOULD BE AS EASY AS DRIVING A TRUCK

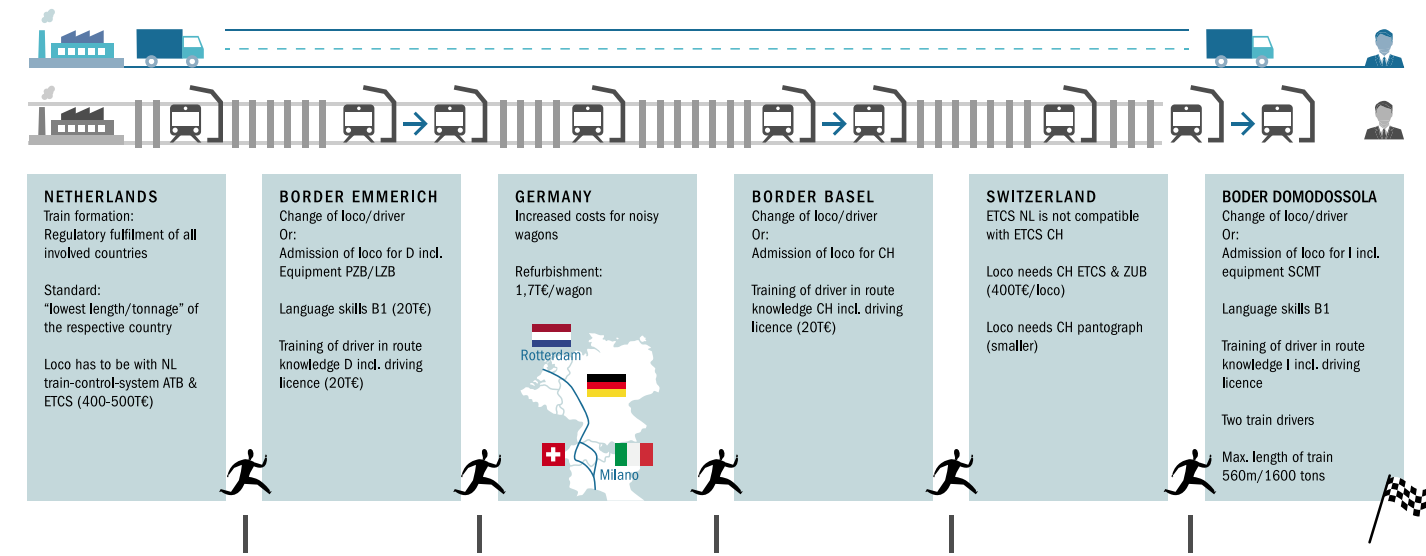
The chemical industry expects the rail freight sector to become easier to use, more reliable and efficient. A drastic improvement in reliability and efficiency is required in all types of rail freight transport. Security of supply is essential for the chemical industry and its customers.

To achieve this improvement, the chemical industry expects from all stakeholders in the rail freight sector to work together in overcoming current interoperability problems in cross-border rail freight transport.

The following chart – using the Rhine-Alpine Rail Freight Corridor as an example - illustrates the inter-operability challenges of international rail freight and what needs to be done:

THE HURDLE RACE ON THE RHINE-ALPINE CORRIDOR

End-to-end, driver of any nationality, on any EU truck, under mandatory driving times and rest periods



Rail freight transport needs to become as easy as road transport. Because true collaborative planning and steering is lacking, a lot of time is wasted along the logistics chain. This makes the end-to-end lead-time at least 24 hours longer compared to road haulage! The many operational hurdles faced at border crossings, due to differences between operating systems and procedures, as illustrated above, need to be simplified and harmonised. For example, the implementation of one operating language (operational phrases), supported by a technical solution, should not be that difficult to achieve. Other examples could be the usage of route navigation and information systems, instead of relying on train driver knowledge of specific route properties, leading also to a single European train driver license.

IMPORTANCE OF SECTOR STATEMENTS AND SECTOR PRIORITIES

Cross border interoperability through the revision of local and European regulations, improved collaboration and information

sharing between the stakeholders, is a must to allow smooth international train operations. The chemical industry supports the 2016 Rotterdam Ministerial Declaration and the commitments expressed in the corresponding 2016 Rotterdam Sector Statement "Boosting International Rail Freight". While all priorities matter to achieve the above, CEFIC particularly welcomes all those priorities having a direct impact on improving reliability or, when rail services are disrupted, on information flow and contingency management:

- Improving coordination of Temporary Capacity Constraints (TCR),
- Improving harmonisation of processes at borders,
- Train tracking and Expected Time of Arrival (ETA),
- Monitoring the quality of freight services with implemented and shared KPIs,
- Effective implementation of the Handbook for International Contingency Management,

being added in 2018, as a crucial lesson from the Rastatt incident.

In order to speed up implementation of the sector priorities, the Sector Statement Group (SSG) Rapporteurs and Project Managers must take the findings and recommendations contained in the "Rotterdam Declaration – Comprehensive Progress Report" (August 2018) forward. From a shippers' and rail users' perspective, follow-up action is lacking visibility. Leadership and support will also be required both from the European Commission, DG MOVE and national transport ministries, as the signatories of the Rotterdam Ministerial Declaration.

WE NEED MORE EUROPE IN EUROPE

Infrastructure management and train planning and steering for international rail freight can only be successful when it is coordinated at international corridor level. To achieve this, international collaboration needs to be further improved.

<p>STRENGTHENING THE ROLE OF THE RAIL FREIGHT CORRIDORS</p> <p>Representatives from National Transport Ministries in the Executive Boards of the Rail Freight Corridors (RFCs), Infrastructure Managers and Railway Undertakings need to improve their corridor thinking further, speeding up the integration and harmonisation of processes along the RFCs.</p> <p>The change this might bring for national infrastructure management is significant, but if we really mean to reduce transport emissions through the modal shift, we need to think and act beyond borders. The rail freight corridors have been established for this purpose, but they need a stronger mandate to be able to perform their role effectively and bring about the urgently required improvements in interoperability and cross-border collaboration. The RFC Management should be given more power to lead and direct changes, in pursuit of the further establishment of a Single European Railway Area, with a common harmonised infrastructure, operating rules and procedures.</p> <p>As such we would recommend the following, at a strategic level:</p> <ul style="list-style-type: none">- To extend the role of the European TEN-T Core Network Coordinators to chair the Executive Boards of the RFCs, with the role of overcoming national resistance to improvements which make sense in a larger European perspective.- These RFC Coordinators should also liaise horizontally, across and between corridors, to ensure consistencies in approach and enable cross-corridor coordination of activities of common interest, capturing synergies, where and	
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<p>as appropriate.</p> <ul style="list-style-type: none">- Consideration should be given to the centralisation of certain operational functions for international freight train management. Today, regional operations centres often manage corridor traffic in a fragmented, suboptimal way. Moving forward, corridor operations should be strengthened and harmonised, taking into account the specific requirements of international freight trains. If we want to see real and quick results, we must strengthen the rail freight corridor organisations by entrusting them with responsibility and competency for capacity planning and improving operational decision-making for international freight trains.- More attention in international rail freight should be given to traffic management. The national traffic management centres should be connected as a “Virtual European Traffic Management” network. This would consist of English speaking traffic controllers, working together following common service levels for mutual communication and incident management. These controllers should be able to use common European tools for train status and dispatching. Communication would also include common previews of traffic patterns, the impact of temporary capacity restrictions and other anticipated disturbances. This “Virtual European Traffic Management” should be complemented by regular task force meetings for each RFC border, resolving process incompatibilities. <p>To strengthen the RFCs further, it will also be important to continue the good work of RailNetEurope,</p>	
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<p>facilitating the alignment between European Rail Infrastructure Managers, Allocation Bodies and Rail Freight Corridors, on their joint mission to coordinate and harmonise international rail traffic management.</p> <p>The above should be taken into account in the current revision of Regulation 913/2010, granting the RFCs a stronger mandate to steer and direct changes.</p> <p>CLOSING MISSING LINKS AND ESTABLISHING SUFFICIENT BACK UP CAPACITY AND DIVERSIONARY ROUTES</p> <p>The Rastatt incident has demonstrated the current vulnerability of our European rail freight network. It has demonstrated that it is vital to have in place sufficient diversionary routes, with appropriate TEN-T infrastructure parameters. Unfortunately, this is still not the case today.</p> <p>More European leadership and strategies are required to overcome national resistance to infrastructure improvements which make sense in the larger European context, along with sufficient European funding to compensate for situations where the majority of the investment burden is in one country and the majority of the benefit is in another country.</p> <p>This applies to both line sections that are included in the geographic definition of the TEN-T RFCs, as well as sections not yet included, but which are crucial either as diversionary, back-up or alternative routes. There must also be sufficient political support at European level for the inclusion of such missing links in the corridor definition.</p>	
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<p>SUMMARY AND CONCLUSION</p> <p>Availability and reliability of rail freight services translates into security of supply for the chemical industry and its customers. The chemical industry is committed to making optimal use of rail freight and has already captured most modal shift opportunities. However, reliability and flexibility of rail freight is lagging behind that of road transport. The chemical industry is therefore finding it difficult to increase modal shift further without jeopardising service levels. <u>Hence drastic improvement of reliability is required before further modal</u></p>	<p><u>shift can be achieved.</u></p> <p>To improve the effectiveness of rail freight quality management, a uniform punctuality KPI should be put in place, measuring punctuality end-to-end. If freight trains are delayed, it is crucial for shippers to receive proactive information with a reliable revised estimated time of arrival (ETA), to be able to inform the consignee of goods and to make adequate contingency plans. <u>The information in the transport chain has to be managed in a professional and cooperative way by all stakeholders.</u></p> <p>The key to improving the reliability and efficiency of international rail</p>
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<p>freight is to improve cross-border interoperability: “No national barriers: one language, less regulation, one highway!”.</p> <p>The Rail Freight Corridors (RFCs) are vital platforms to initiate and lead the changes required from national Ministries of Transport and Infrastructure Managers to move towards one standard infrastructure for international rail freight to become easier, more reliable and efficient.</p> <p>Joost Naessens</p>

SESSION 2

How can the fragmentation of international railway law be avoided and the quality of international regulations and their effective implementation be ensured?



Dr. Vytautas **NAUDUŽAS**
Ambassador of the Republic
of Lithuania



Maurizio **CASTELLETTI**
EC-DG MOVE Head of Single
European Rail Area unit



Wolfgang **KÜPPER**
OTIF
Secretary General

Summarise experience in order to minimise the fragmentation of international law

During the last few decades, the international transport network has changed Europe dramatically and fundamentally. It has become smaller, better interconnected, more comfortable and environmentally friendly. Transport delivers straight to our homes a modern *modus vivendi*. Railways provide connectivity and cooperation. Connectivity opens trust between countries and people. Connectivity benefits everybody in terms of sustainable development, a clean environment and financial advantages. **Railways are like a heart that pumps heat around Europe and other continents.**

As a driver of the global economy, railways are indispensable, in spite of a number of challenges. The main challenge is not infrastructure, technology or the railway market. It is the lack of efficient regulations for international and domestic carriage. **The Vilnius Protocol adopted in 1999 was a legal response to changes in the railways.** I am glad to note that commemorating the 20th anniversary of this document, four of those who witnessed the signing of this historic Protocol were among the participants at the OTIF Symposium in Vilnius in 2019:

Mr Michel Burgmann, Director General of the Central Office in 1999, Mr Hans Rudolf Isliker, Chairman of OTIF's Administrative Committee and representative of Switzerland in 1999, Ms Viviane Vaucher, one of the interpreters in 1999, and the author of these lines, the chairman of OTIF's General Assembly in 1999 and 2019. **OTIF does not build railways, but provides regional rules for them.** OTIF now focuses its efforts on minimising the fragmentation of international railway law. What is still required in this area? It is not just speed that is required; a balance between infrastructure, technology and the international legal basis needs to be maintained. **Harmonised Euro-Asian rules for transport are necessary, rather than a legal jungle.** The value of transport between Europe and Asia exceeds an incredible four billion USD per day. This route carries the largest amount of freight anywhere in the world. Unfortunately, only a small amount of this freight is carried by rail on this route. The amount of freight carried needs to be increased significantly. The law is adequate, in that it satisfies the interests of people, companies, international institutions and states. This is

why our experience should be summarised in order to minimise the fragmentation of international law by monitoring and indicating what works and what does not.

Europe is united in diversity. Four EU railway packages are an impressive result. It seems that the EU works according to the principle: ready, steady, reform! This contributes towards better coordination of the interests of actors in the railway market. Mr W. Küpper, the Secretary General of OTIF, contributed a great deal to the work on the EU's railway packages and now deals with a much broader geographical area. Vision, provision and international regulations can set a realistic agenda for closer EU – Asian railway ties, but **the path to success will always be to implement the regulations developed by OTIF.** OTIF's Symposium in Vilnius in 2019 provided an excellent platform for the exchange of ideas and was a significant step towards the more effective implementation of international railway law.

Dr. Vytautas Naudužas

Towards the single European rail area – A model for developing international rail law and standards¹

International railway law is a complex collection of national, regional and international legal frameworks, supplemented by industry standards and practices. Rail transport law is, therefore, still divergent at international level, in particular when compared to other modes of transport for which worldwide rules have been in force for many years and decades. At the same time, there are important dynamics in the global economy that provide incentives for lawmakers and regulatory bodies to work towards a unified system of legal norms for railways and international rail transport services.

This paper analyses and highlights the experience gained within the European Union (EU) in the rail transport sector and how it could benefit the ongoing debate on unifying international railway transport law. The EU's policy framework on rail transport is international by design and builds upon a unique political venture, aiming to create a single market across all EU countries. The main output of the EU rail policy has been the establishment of a single European rail area, where the same economic norms, technical standards and operating conditions effectively apply in a transparent and non-discriminatory manner at EU level.

Rail transport in the EU is characterised by technical and regulatory diversity, due to the historical development of national networks in each Member State over almost two centuries. Before the first EU legislation on rail transport appeared in the early 1990s, fully integrated State railway

companies operated rail transport on a monopolistic basis with no real market for competition. Costs were continuously increasing, as were debts. Notably, both infrastructure management and transport operations were highly regulated with detailed requirements prescribed at national level.

To overcome these challenges, facilitate cross-border operation, and make rail transport more competitive, the EU decided to create a single European rail area featuring: i) high quality customer oriented services; ii) a level playing field between EU Member States; iii) cost efficient operations; and iv) market driven innovation.

The general objective was to improve the competitiveness of railways, by comprehensively transforming the system of regulations and standards.

SHARED ECONOMIC PRINCIPLES

This change of paradigm required an in-depth transformation of the railway system throughout the EU, based on key principles underpinning the reform, namely: i) separation of transport services from infrastructure management; ii) railway companies being independent of the State; iii) EU-wide licensing system for railway undertakings; iv) uniform rules on track access charges and capacity allocation; v) sustainable funding of infrastructure and transparent financial management; vi) equal access to service facilities; vii) independent and effective national rail regulatory bodies; and viii)

competitive tendering of public service contracts.

Thanks to this reform process, most national railway companies in the EU evolved into separate divisions or independent companies for infrastructure management, passenger transport and freight operations. European networks of infrastructure managers and rail regulatory bodies were established, and the European Commission developed its capacity as the central regulator for monitoring the implementation of the EU legislation and the operation of the markets across the entire EU. In light of this, it appears necessary to agree on and implement shared principles in order to make progress on harmonising rail transport law at international level.

A COMPREHENSIVE REGULATORY FRAMEWORK AT EU LEVEL

The fragmentation of the railway law in the EU was primarily addressed through a vast reform of the sector and the creation of a comprehensive new legal framework. From the beginning of the 1990s until today, several legislative packages were passed at EU level, with two main objectives:

- Opening markets to competition as a means of improving quality of service; and
- Improving the interoperability and safety of the railway system within the EU.

¹ The views expressed by the author are personal and do not necessarily reflect those of the European Commission

The Fourth railway package, adopted in 2016, provided the necessary instruments to complete a true internal market for rail services. The package is still being implemented and is expected to be fully put into effect in the coming years. In addition to the 'market' and 'technical pillar', the EU law on railways also includes cross-cutting legislation on the transport of dangerous goods, passenger rights, and social conditions.

The creation of the European Union Agency for Railways in 2004 was also an important step in consolidating and putting into effect the single European rail area.

A GOVERNANCE FRAMEWORK AT CENTRAL LEVEL

The European Union Agency for Railways was created to provide the EU Member States and the European Commission with technical assistance in developing and implementing the single European rail area. The Agency's tasks include:

- Promoting a harmonised approach to railway safety;
- Devising technical and legal frameworks for removing technical barriers; and
- Acting as the EU-wide authority for the European Railway Traffic Management System and for issuing railway vehicle authorisations and single safety certificates.

Hence, the Agency plays a central role in pooling expertise and as a platform for exchange and development. In June 2019, it also acquired a new role to act as a one-stop shop and issue authorisations for placing vehicles on the market.

The operation of the single European rail area also required a specific governance framework to be established at EU level, so that the EU rail policy framework could be implemented and applied effectively.

Two committees – the Single European Rail Area Committee and the Rail Interoperability and Safety Committee – were set up under the legislation to prepare and adopt the necessary executive measures at EU level (e.g. administrative decisions, implementing regulations). The two committees operate formally, and are composed of Member States' representatives and are chaired by a representative of the European Commission.

In addition, several stakeholder platforms and expert groups were set up to discuss implementation issues and organise the exchange of information and best practices in a systematic manner. There are: i) the European Network of Rail Regulatory Bodies; ii) the Group of Experts on Rail Market access; iii) the European Network of Infrastructure Managers; and iv) the Dialogue for Railway Undertakings.

The European Commission is also responsible for monitoring the operation of the markets within the EU. Every two years, it compiles and publishes the Rail Market Monitoring Survey (RMMS), which provides a detailed and comprehensive statistical description of the rail transport sector in each Member State. The sixth RMMS report was published at the beginning of 2019 and can be accessed on the website of the European Commission's Directorate-General for Mobility and Transport.

The process of harmonising rail transport rules and standards at EU level has been supported and catalysed by two technological

programmes: i) the Shift-2-Rail Joint Undertaking, a public-private partnership established in 2014 to pool and coordinate research activities and innovation efforts at EU level; and ii) the European Rail Traffic Management System, an industrial programme for harmonising the automatic train control and communication system.

A LEGALLY-BINDING FRAMEWORK ENFORCEABLE AT EU LEVEL

In order to improve the quality and the effective implementation of EU rules applicable in the rail transport sector, the EU adopted a clear, goal-based, and legally-binding framework that is enforced by the European Commission and by the Court of Justice of the European Union.

Without these powers provided for by the EU treaties, it would have been much more difficult to ensure the timely and uniform application of the rules harmonised at EU level.

On the other hand, EU rail legislation contains various items of flexibility that allow different national practices to fulfil the objectives of the legislation; for example, vertically integrated railway undertakings may exist, providing there is an effective and documented functional separation between infrastructure management and transport operations. Also, the EU legal framework for rail transport is mostly regulated by Directives, which set out the objectives but allow EU countries to take appropriate transposing measures that take into account the specific situation of each country's legal and administrative system.

A STEP-BY-STEP APPROACH

In a majority of EU Member States, the rail sector has been a strategic component of the economy, and has greatly benefited society and linked up territories. Therefore, the reform process needed to be carried out step-by-step, over a rather long period.

Accordingly, the opening up of the markets to competition was carried out in several successive phases, in parallel with the implementation of structural reforms: i) in 2001, the first railway package provided for the opening up of competition for international rail freight services on the trans-European transport network; ii) in 2004, the second package liberalised international rail freight transport services on the entire EU network and also required opening up of competition for domestic freight services; iii) in 2010, the third package liberalised international passenger transport services; iv) in 2016, the fourth package completed the process by opening up competition for domestic passenger services (open access and competitive tendering of public service contracts).

Similarly, the harmonisation and unification of rail transport law at international level should be carried out using a progressive and gradual approach.

FINDING SYNERGIES AND COMPLEMENTARITY

The scope of the EU rail legislation concerns the general organisation and regulation of the railway system and does not cover the field of contract law, which is regulated at national level and/or at international level.

For example, the Convention concerning International Carriage by Rail (COTIF) includes uniform rules on the contract of international carriage of goods and passengers by rail, uniform rules on the contracts of use of vehicles in international rail traffic, and uniform rules on the contract of use of infrastructure in international rail traffic.

As all EU Member States (with international rail traffic on their territory) are also members of the Intergovernmental Organisation for International carriage by Rail (OTIF), there is a clear interest for the EU and OTIF to cooperate in order to ensure complementarity and consistency between OTIF rules and EU law on rail transport.

The EU acceded to the COTIF Convention in 2011 and became a full member of OTIF, with the status of 'Regional Economic Integration Organisation'.

In this capacity, the EU can take an active part in developing and unifying rail transport law beyond its internal market, while providing OTIF with a great wealth of technical and standard-setting expertise – for example the new Appendix H of the COTIF Convention on safe operation of trains in international traffic is largely inspired by, and derived from, the provisions and technical specifications in the EU legal framework. This kind of synergy is very valuable and supports the harmonisation process at international level.

Following this rationale, international railway law should develop at international level based on the existing legal systems worldwide, in order to prevent rules and requirements currently in force from overlapping and fragmenting.

UNIFYING RAIL TRANSPORT LAW AT INTERNATIONAL LEVEL

Some of the success factors that helped to create the single European rail area may be applied when it comes to unifying international rail transport law.

The EU already plays an important role in this area.

As far as candidate and potential candidate countries for EU membership are concerned, there is a clear commitment to incorporate and apply the EU legislation on railways, with a view to helping possible future Member States to integrate into the market and to improve rail connectivity in the pan-European region.

To foster this strategy, the EU and six Western Balkan partners (Republic of Albania, Bosnia and Herzegovina, Republic of North Macedonia, Kosovo², Montenegro and Republic of Serbia) signed in 2017 and ratified the Treaty establishing the Transport Community applicable in road, rail, inland waterway and maritime transport.

The Transport Community is based on transport markets and networks being progressively integrated based on the relevant EU legislation, including in the areas of: i) technical standards; ii) interoperability; iii) safety; iv) security; v) traffic management; vi) state aid; vii) social policy; viii) public procurement; and ix) environment.

Furthermore, the EU neighbourhood policy provides a framework for cooperation and for streamlining rail transport normative systems with several non-EU

² This designation is without prejudice to positions on status, and is in line with UNSCR 1244 (1999) and the ICJ Opinion on the Kosovo declaration of independence

countries. This is particularly relevant in the case of the Eastern Partnership, which is a joint policy initiative between the EU, its Member States and its six Eastern neighbours: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.

At regional level, the EU recognises that nine of its Member States, which are OTIF members, are also members of the Organisation for Co-operation between Railways (OSJD); on this account, the EU is involved in the ongoing negotiations on a draft OSJD convention, with the view to bringing OTIF and OSJD systems closer – thereby easing and supporting the process of harmonising and unifying rail law and technical requirements across the Eurasian continent.

At global level, the Inland Transport Committee of the UN Economic Commission for Europe (UNECE) plays an important role for legal and technical harmonisation of land transport. In 2019, the Inland Transport Committee (ITC) adopted – with the EU’s support – its 2030 strategy, which set out the ambition to create a worldwide framework for sustainable inland transport, including rail. The Contracting

Parties to legally-binding conventions administered by ITC and its Working Parties currently include 147 UN Member States. The adoption of this strategy signals the further opening up of the conventions under the ITC’s purview to the entire 193 Member States of the UN.

In this context, the work of the UNECE Group of Experts towards Unified Railway Law is particularly significant and relevant.

In this forum, the European Commission, along with several EU and non-EU countries, advocates gradually developing global rules for rail transport law, starting with the adoption of a new legally-binding instrument providing a single legal and liability system for the contract of carriage of goods by rail in international traffic between Europe and Asia.

This could be a major first step in the process of unification of railway law at global level also taking into account the development of Eurasian rail transport corridors.

CONCLUSIONS

Based on the experience gained in creating a harmonised legal system

in the EU, the right approach for unifying international railway transport law is a pragmatic and step-by-step approach, which enables trust to be built among stakeholders and cooperation mechanisms to be developed between the different parties involved.

More specifically, several success factors need to be considered. Firstly, a shared understanding of fundamental administrative and economic principles underpinning the functioning of railways – this determines a process of structural reform and regulatory convergence. Secondly, the justification and prioritisation of technical areas and market segments, for which legal norms should or could be harmonised. Thirdly, a coherent approach to developing railways at national level, as part of integrated international and national transport strategies. Fourthly, an effective mind-set of cooperation between and within relevant international organisations.

Maurizio Castelletti

OTIF’s role in ensuring uniform and high quality railway law

20 YEARS OF THE VILNIUS PROTOCOL - SITUATION UPDATE

The 20th anniversary of the Vilnius Protocol provides a welcome opportunity to take stock of OTIF’s position. **Rail transport is currently at the centre of the political discussion in terms of finding solutions for a sustainable transport policy** (see, for example, the EU’s Green Deal, UN’s SDG). To achieve climate targets and in light of social megatrends, such as urbanisation and demographic changes, the railways are indispensable. Rail transport enables the sustainable performance of passenger and freight transport that preserves the environment, without restricting people’s mobility and, at the same time, rail transport strengthens the economy. For OTIF and international rail transport, it is important that the legal conditions for these developments be designed as favourably as possible.

HOW CAN THE FRAGMENTATION OF INTERNATIONAL RAILWAY LAW BE AVOIDED OR OVERCOME?

The Vilnius Protocol adapted the somewhat antiquated rail transport legal regime of COTIF to the requirements of a modern European transport market. The current legal framework makes it possible to perform rail transport in very different ways, unshackled from the monopolies of the former state railways. With regard to compatibility with the EU’s *acquis communautaire*, complete harmonisation was thus achieved. With regard to the COTIF Appendices CUI, APTU and ATMF, this harmonisation was reached step by step with the help of the

Revision Committee. In some respects, harmonisation goes so far as to mean that COTIF is applied directly in the EU Member States’ national sphere (cf. PRR/CIV, RID).

Another important outcome of Vilnius in terms of COTIF/EU legal harmonisation was OTIF’s new role of developing rules for the mutual acceptance of vehicles, based on EU legal provisions and technical standards (interoperability/ TSI, safety). In future, it will be important to pay close attention to the interface between the SERA and international transport, e.g. in the context of implementing the technical pillar of the 4th Railway Package. **The external border of the EU must in no way become an obstacle to international rail transport.**

Another important task for OTIF is to achieve significant progress in harmonising the two systems of transport law of OTIF (COTIF) and OSJD (SMGS/ SMPS). For historical reasons, the two organisations represent different railway systems that urgently need to be adapted to current developments, particularly in the Euro-Asian region. The very welcome growth in Euro-Asian rail freight traffic, where rail transport is playing an increasingly significant role in addition to the more expensive air freight option and more time-consuming sea routes, will in future require complete legal and technical interoperability of the systems.

There has already been important progress in this area as a result of the common CIM/SMGS consignment note and in the carriage of dangerous goods. Work being carried out within the UNECE (URL) and the current reform of OSJD offer further opportunities for harmonisation. Both these

developments require considerable efforts by the Member States if they are to be successful. With regard to developments in Geneva, it is important to find out what reasons in terms of transport law have led to the URL in its current form being rejected.

HOW CAN IT BE ENSURED THAT INTERNATIONAL RAIL TRANSPORT LAW IS OF HIGH QUALITY?

In addition to avoiding new interfaces and the harmonisation of transport law systems, the uniform application and ongoing development of transport law itself is another major challenge.

In order to simplify the application of COTIF and its further development, some important decisions were taken in this respect at OTIF’s 13th General Assembly in September 2018.

One of these was to amend Article 34 of COTIF so that the period for the entry into force of amendments to the Appendices to the Convention was reduced to three years in order to react more quickly to developments in the rail sector.

However, it will also be necessary to keep a watch on the rapid and complete implementation of COTIF in national law. Since the Vilnius Protocol, this has been a specific task of the Secretary General, as the depositary of COTIF. Recognising the necessity of this, the Secretary General set up an advisory Working Group of Legal Experts. Its task is to support the organs of OTIF in terms of legal matters, thus simplifying their work, and to ensure that the Convention is effectively managed.

The Working Group’s role is of a

preparatory and advisory nature in the legal area and includes the following particular tasks:	application and implementation of COTIF;
<ul style="list-style-type: none">- Prepare draft amendments or additions to COTIF;- Advice and support in legal matters;- Promote and facilitate the application and implementation of COTIF;- Monitor and assess the	<ul style="list-style-type: none">- Forum and think-tank for the OTIF Member States, where relevant legal issues can be addressed and discussed.
CONCLUSION	
All the signs are that, as at the start of the industrial revolution in the 19 th century, the railways can again make a significant social	

contribution to resolving transport problems and will thus become the means of transport for the 21 st century.
OTIF is aware of its important role in ensuring uniform international railway law. The focus of the work must be to overcome the differences in the legal systems for rail transport and to ensure that there is a high quality legal framework.
Wolfgang Küpper



SESSION 3

Evolution of international railway market: challenges and objectives for contractual law and organisation of efficient international traffic



Ralf-Charley SCHULTZE
UIRR President



Cesare BRAND
CIT Secretary General



Dr. Péter RÓNAI
RNE Vice-President

Challenges and objectives for contractual law and organisation of efficient international traffic

The President of UIRR, Ralf-Charley Schultze, moderated this panel with the participation of Cesare Brand, General Secretary of the International Rail Transport Committee (CIT), Péter Rónai, Vice-Chairman of RailNet Europe (RNE) and Peter Jäggy, Secretary General *ad interim* of Forum Train Europe (FTE). CIT, RNE and FTE are working closely together. All three are voices of the sector.

The objectives of CIT are mainly the implementation of COTIF and European law that has an impact on transport law, the standardisation of the contractual relationship between carriers and between carriers and their customers for passenger and freight traffic and representation of its members' interests vis-à-vis the authorities and other organisations. Market opening in rail transport started in the early 1990s. Since then, three major trends have been identified: digitalisation, increasing competition and door-to-door traffic.

The aim of RNE, the umbrella organisation for Infrastructure Managers and allocation bodies, is to help facilitate international rail business. It delivers tools and solutions for international infrastructure management and provides information on the European Railway Infrastructure. RNE follows a market-oriented approach and designs the entire rail infrastructure production process. In addition, RNE acts as a coordination platform for the development of common procedures, documents and IT tools across all 11 Rail Freight Corridors.

Some examples of international rules are:

- the Uniform Rules concerning the Contract of Use of Infrastructure in International Rail Traffic (CUI), which are international law and an appendix to COTIF applicable to any contract of use of railway infrastructure in international railway traffic
- the European general terms and conditions for the use of infrastructure (EGTC-I), a set of basic contractual conditions for use of railway infrastructure, which RNE and CIT recommend applying to all contracts of use of railway infrastructure for international or international and domestic transport by rail and use of services in service facilities operated under an IM's control
- the Standard contract of use of infrastructure (SCU-I) which should be a contract template serving as toolbox for IMs and RUs.

CIT suggests alignment with existing texts, in particular EGTC-I, and application to international and domestic transport.

FTE is the European coordination platform of railway undertakings for cross-border passenger and freight trains. Its main tasks are the harmonisation of production plans and path requests and the harmonisation of international processes and IT systems. The most important projects are the redesign of the international time table process (TTR) and the technical specifications for freight and passengers (TAF/TAP-TSI). Optimising international trains is a very intensive and iterative process. Railway undertakings cannot do it on their own; they need

infrastructure managers, but also the customers to support their work.

UIRR is the industry association for combined transport in Europe. The International Union for Road-Rail Combined Transport represents the interests of European road-rail combined transport operators (customers of the RUs) and transshipment terminal managers. Its aggregated transport performance represents more than half of European combined transport, including port hinterland, continental and intercontinental relations, while including both rolling motorway and unaccompanied transport services. The Association's activities focus on three areas of interest: (i) the quality performance of rail freight, (ii) a fair, mode-neutral regulatory framework, and (iii) the enhancement of intermodal transport. In this context, UIRR promotes combined transport and contributes to the development of its best practice and standardisation. It also administers essential components of digital systems that aid daily operations, including the issuance of the ILU Code identifier for non-ISO loading units.

In the multimodal logistics chain, a lot of stakeholders are involved. The positions of the key stakeholders on the need for further harmonisation are not always aligned, but simplification of the contractual framework through harmonisation seems key to improving the competitiveness of rail transport.

OTIF LAW MAKES RAILWAY TRANSPORT EASIER

The issue is to make railway transport easier and to eliminate the complexity of rail transport. In order to improve the development of railway transport, the sector has some requirements and expectations.

COTIF is a proven and high-quality framework for rail transport contracts and the development of common procedures. The modern, forward looking legal framework should be further developed and adapted to some new needs and challenges.

COTIF has been the backbone of rail freight transport in the greater European railway area, providing rules that were vital to conducting cross-border traffic in times when the continent was divided. The European Union's eastward extension to the former socialist countries and the incorporation of COTIF into EU law has meant that the initiative in terms of developing legislation for rail transport has mainly passed to the EU.

Political developments in nearly all regions neighbouring the EU – from North Africa through the Middle East to Ukraine and Russia in the East – have resulted in the deterioration of relations, and occasionally even in wars that have negatively affected trade relations. The consequences were quite negative from the perspective of rail freight.

Intercontinental rail transport along the “Silk Road” connecting China to Europe has been the exception in this regard. Substantial railway investments in both China and Russia have fueled promising developments in rail freight traffic. Today, the main obstacles to further rapid development are less infrastructural than political, the heterogeneity of customs and

railway rules, the underlying law and the differences in the facilitating IT systems.

Should peace prevail on the wider, interconnected Eurasian-North African landmass, and the development of trade be unobstructed, the need for more efficient and smoothly running rail freight is certain. OTIF, as the custodian of the railway law that governs this activity, should use the time to intensify its activities to update international railway law.

The rules enshrined in COTIF and its appendices are critically important to creating a functioning Eurasian-North African railway area. In some instances, the rules need updating or more details; in others, they need to be slightly broadened – to include terminal rules for instance – in order to be used as a blueprint to develop operational processes and the underlying IT systems, as well as the architecture for the data flows that need to accompany rail freight in the 21st century.

THE FUTURE OF MULTIMODAL TRANSPORT

The Commission's multimodal year 2018 showed that intermodal transport is the engine of growth of railways. While the rail mode itself is stagnating and interoperability has not yet been fully implemented in the EU, the volume of intermodal traffic has doubled in less than 18 years.

Thanks to the techniques of intermodal transport, rail freight is rapidly becoming capable of offering competitive solutions for logistics and of delivering the right conditions to transport diverse cargo, either palletised or otherwise grouped into smaller units. As trade is becoming more centred on the just-in-time delivery of these

smaller quantities, **the intermodal technique widely used in maritime shipping is becoming dominant in rail freight as well.** This trend, observed throughout the European Union, is certainly not stopping at its borders, but it is extending beyond them.

These facts have a direct impact on the regulations. **International rail freight law must therefore extend to the particular features of intermodal transport** to include its specific transshipment and technical, safety, liability and administrative aspects.

THE RELATIONSHIP BETWEEN DOMESTIC, REGIONAL AND GLOBAL RAILWAY POLICY AND REGULATIONS MUST BE ARRANGED IN A NEW WAY

International law goes beyond international transport; it is also harmonising and modernising national law. Just as COTIF became the backbone of European railway law, so should its updated, 21st century version be made suitable to support the daily operation of freight trains throughout the entire Eurasian-North African land mass. OTIF should develop the rules and then facilitate recognition of the Convention and its appendices as the backbone of railway law in every country within this area that is connected by railway infrastructure.

Ralf-Charley Schultze

20 years of COTIF. Quo vadis?

COTIF 99 was developed in the 1990s. At that time, liberalisation and opening of the railway market were on the cards. While it was possible to discern the beginnings of digitalisation at that time, this and other trends have now become much more apparent. Does COTIF 99 need to be adapted to reflect these developments? Do the railways have to modernise the “legal” tracks on which they operate?

CONGRATULATIONS TO THE COTIF ON ITS 20th BIRTHDAY!

COTIF 99 international railway law was developed in the 1990s with the impending liberalisation of the railway market in mind. It has been in force since 2006. An outstanding feature of these rules is their agreeably high legal quality. The law has proven itself in practice. The introduction of competition was completed only a few years after COTIF 99 was implemented, in 2007 for freight traffic and 2010 for international passenger traffic.

Since then, we have identified three important trends: digitalisation, increased competition and the demand on the part of customers for contractual “door-to-door” solutions. Today, 20 years later, we have to ask ourselves whether COTIF 99 needs to be adapted in response to these trends.

DIGITALISATION

COTIF 99¹ was not unaware of the digital transformation; its arrival was already on the cards. Article 6 § 9 of the CIM² therefore defines the legal basis for the electronic consignment note. However, the electronic consignment note must have functional equivalence with the paper solution, particularly for reasons of evidential value.

OPEN QUESTIONS ABOUT DIGITALISATION

There are three main questions concerning digitalisation and COTIF 99.

- *Is the requirement for functional equivalence in the context of technical developments in digitalisation still up to date?*

In tomorrow’s digital world, only predefined data records will be transmitted electronically. IT systems will be interoperable and will no longer rely on “printable” interfaces. Data records will not only contain the content of the consignment note but will also contain information flows to the authorities (such as customs, RID) or to the infrastructure managers (such as TAF TSI). A governance system will regulate access to data. Whether the requirement for functional equivalence will still be appropriate in this kind of digital environment is rather doubtful.

- *What about evidential value?*

On paper, it is quite clear; the paper-based consignment note (original and carbons) is proof of the contract and is recognised by the courts (Article 12 CIM). The situation is more complex in the digital world. An investigation by CIT has shown that the acceptance of digital documents (meaning print-outs of digital information) is regulated very

differently in different countries. Today, this involves a huge amount of legal uncertainty and is one reason why the digitalisation of consignment notes is progressing so slowly. The situation with passenger traffic is similar. Article 7 § 5 of the CIV³ states that a ticket can also take the form of electronic records that can be transformed into legible written symbols. The data must also be functionally equivalent in terms of its evidential value, although it is doubtful whether this will continue to be realistic in a digital world.

- *What about customs regulations?*

According to the current Article 6 § 7 a legal connection exists between the consignment note and customs law. Although the simplified customs procedure is likely to be with us for several years yet, the question remains as to how freight and customs law should act within a digital environment (new EU customs code). Paper will inevitably become less important.

INCREASED COMPETITION

Encouraging competition was one of the key objectives of COTIF 99. However, this was more a theoretical concept than a reality in the 1990s.

Today it is different. The introduction of competition was completed for freight traffic in 2007 and for international passenger traffic in 2010. National passenger traffic is following in 2020. The share of the competitor railways in freight traffic is around 30%, although the share in passenger traffic is still well below 20%.⁴ The EU’s market regulation of the railway sector has led to an increase in the number of players with differing financial incentives (railway undertakings, infrastructure managers, service facility operators, wagon keepers, etc.). COTIF follows the principle of the “one-stop shop” in the execution of contracts, which is well understood and appreciated by the customers. The complex railway system can only compete if it is easy for customers to understand and to use, even when there are problems. The pathways must remain clear and simple for the customer. They do not want to have to find their way through a maze.

What are the roles of the current players in this system? The doors to the previously mentioned, and certainly desirable, COTIF “one-stop shop” are in the hands of the railway undertakings. These are the primary points of contact for passengers and consignors of freight in the event of a disruption in the performance of the contract of carriage. The allocation of responsibility and

compensation between the various participants takes place “behind the scenes” as part of a recourse settlement. In other words, the most important matter is dealt with behind closed doors.

THE RULES IN THE BACKGROUND

In the event of death or personal injury, the passenger traffic carrier is liable in principle, irrespective of the infrastructure used.⁵ According to Articles 8, 11 and 12 of the CUI, recourse against the infrastructure manager is limited⁶ to the compensation due to the passenger on the basis of the CIV. Excluded from the recourse against the infrastructure manager are the increasingly important compensation payments for delays as prescribed by the EU Regulation on Passenger Rights. According to media reports, the annual compensation payments made by DB now amount to over 50 million EUR. The parties could, of course, reach an agreement on whether and to what extent the infrastructure manager is liable for the damages suffered by the carrier as a result of the delay or disruption (Article 8 § 4 CUI). But let’s be frank – are infrastructure managers really interested?

The same principles also apply to freight traffic, where the carrier is liable for loss or damage and for exceeding the transit period (Article 23 § 1 of CIM). The carrier is also liable for the loss of or damage to the wagon or its accessories.⁷ Here too, recourse against the infrastructure manager for damages suffered by the carrier as a result of a delay or operational disruption is only possible if the parties have concluded an appropriate

agreement (Article 8 § 4 CUI).

The wagon keeper is liable to the carrier for damage caused by the wagon only if the carrier can demonstrate fault on the part of the keeper (Article 7 § 1 CUV). In practice, such proof is difficult to provide.

OBVIOUS DISINCENTIVES

It is clear that one side is at a disadvantage, and that is the railway undertaking. There is no commercial reason for infrastructure managers to conclude an agreement on delays and operational disruptions for either passenger or freight traffic. The principle of (voluntary) agreements does not go far enough here. Mandatory regulation is needed, and it should eliminate disincentives from the system at the same time.

What is the incentive for an infrastructure manager to offer high-quality train paths if he does not have to pay for the financial consequences of delays, even if he has caused them? Experience has shown that state-owned infrastructure managers subsidised by the public sector point to the lack of a statutory framework and refuse to increase their contractual liability “voluntarily”. While this is understandable, it is far from satisfactory.

The same applies to wagon law: why should a wagon keeper invest in safety measures when he is unlikely ever to be liable for the damage caused by his wagons? After all, during the negotiations on the GCU (General Contract of Use of Wagons), the wagon keepers agreed to reduce the strict burden of proof placed on

¹ Convention concerning International Carriage by Rail, or COTIF for short, according to the Vilnius Protocol.

² Uniform Rules concerning the Contract for International Carriage of Goods by Rail - Appendix B to COTIF.

³ Uniform Rules concerning the Contract for International Carriage of Passengers by Rail (CIV) - Appendix A to COTIF.

⁴ Figures from fifth report on monitoring development of the rail market by the European Commission, 2016.

⁵ Article 26 CIV

⁶ Uniform Rules concerning the Contract of Use of Infrastructure in International Carriage by Rail - Appendix E to COTIF

⁷ Article 4 § 1 CUV; Uniform Rules concerning the Contract of Use of Wagons in International Rail Rtraffic - Appendix D to COTIF

railway undertakings towards the wagon keepers in the CUV.

The railways can only compete with road transport if the regulations provide economic incentives (such as liability rules, for example) to support an improved “system performance” by the railway towards its customers.

ACTING MORE QUICKLY

The growth in competition is making it necessary to alter some of the COTIF appendices. For example, there is the matter of whether, in view of the changes in the logistics sector, the consignment note can be made a letter-of-credit-compliant document. In order to respond to these rapid changes in the market environment, the adjustment mechanisms for regulation need to be accelerated. The basis for doing so was put in place at the last OTIF General Assembly in 2018.

DOOR-TO-DOOR SOLUTIONS

The railways have a reputation with customers for being extremely complicated. The complexity of

the law and contracts is a major reason for this negative perception, as well as quality. Freight traffic customers in particular want to send their goods from A to B without being confronted with the different regulations for each mode of transport and the likelihood of having to deal with complex transport contracts. Digital platforms, such as blockchain, and smart contracts are helping them to conclude and process intermodal transport contracts from A to B more conveniently and easily. For this reason, carriers are under an increasing obligation to bear the legal and financial risks of the transport chain.

The question here is whether and how COTIF can support this technical development from a legal point of view. On this same matter, **the authors of COTIF 99 have already implemented a multimodal approach to regulation (Article 1 §§ 2, 3 of CIV and 3, 4 of CIM). This approach should be continued.**

In view of the increasing national importance of COTIF (CIV, for example, passed into national law as part of the EU Passenger Rights Regulation), it is regrettable

that the last revision of the CUI missed the opportunity to adjust the scope of application of CIM, CIV and CUI and to simplify their contractual structure, at least for international traffic.

CONCLUSION

From CIT’s point of view, COTIF and its appendices provide a valuable, high-quality legal framework for the performance of international rail transport. The framework has proved to be very successful in practice. In the 1990s, COTIF was devised to be modern and forward-looking. This forward-looking approach of the “founding fathers” must be maintained – especially in the face of digitalisation, increased competition and **multimodal door-to-door transport! The overriding objective must be to make the complex railway system even more competitive with other modes and systems of transport through the use of innovation, legal certainty and the highest level of quality and customer awareness.**

Cesare Brand

RNE’s vision for harmonisation of the contractual framework

ABOUT RAILNETEUROPE

RailNetEurope (“RNE”) was set up in 2004 on the initiative of a number of European railway Infrastructure Managers and Allocation Bodies (IMs/ABs) to help its members meet the challenges of the rapidly changing railway sector in Europe and to promote international rail traffic. This entails developing harmonised international business processes and supporting IT tools, templates, handbooks and guidelines.

Today RNE has 35 Full Members from over 25 different countries and 10 Associate Members (the Rail Freight Corridors). All in all, their rail networks add up to well over 230 000 kilometres of railway lines. Further information on RNE is available at rne.eu.

INTRODUCTION TO THE TOPIC

Harmonising contractual relations between infrastructure managers and their customers¹ to facilitate international rail transport has been a long-standing objective of the railway sector, in particular of railway undertakings/applicants. In order for rail to remain competitive with other modes of transport, it is of paramount importance to reduce the complexity of operating international rail transport services; in this context, the fragmentation of the contractual framework needs to be tackled.

RNE has launched a project aimed at overcoming this fragmentation by analysing existing documents, identifying missing or overlapping contents, and providing standardised structures and texts; in this Article, RNE’s vision for approaching the harmonisation challenge will be presented.

INTERNATIONAL AND EU LAW AS A BASIS FOR THE WORK

Any attempt to address the current fragmentation of the contractual relations between infrastructure managers and their customers needs to take into consideration the existing legal framework, and in particular the following documents/acts:

INTERNATIONAL LAW

- **Appendix E to the Convention concerning International Carriage by Rail (“COTIF”), i.e. the Uniform Rules concerning the Contract of Use of Infrastructure in International Rail Traffic (“CUI UR”)**

The CUI UR constitute a set of binding rules for international rail transport operations, with a focus on liability rules. They are based on the fundamental idea of granting the parties to the contract maximum freedom in the constitution of their contractual relationships, with liability, however, having to be regulated in a uniform

and mandatory manner².

The application of the CUI UR is obligatory (only) insofar as the purpose of the contract of use of railway infrastructure is international carriage by rail within the meaning of the Uniform Rules concerning the Contract of International Carriage of Passengers by Rail - Appendix A to COTIF (“CIV UR”) and the Uniform Rules concerning the Contract of International Carriage of Goods by Rail (CIM) - Appendix B to COTIF (“CIM UR”). The contracts governed by CUI UR can be contracts under civil law or under public law. As the scope of application of CUI UR partly overlaps with that of corresponding EU law, CUI UR contain dedicated clauses to clarify the hierarchy between CUI UR and EU law on specific aspects governed by the CUI UR.³

EU LAW

- **Directive 2012/34/EU establishing a single European railway area**

The key objective of Directive 2012/34/EU⁴ (“the Directive”) is to enable non-discriminatory access to the railway network of the EU for all railway undertakings. To this end, the Directive contains a set of procedures and requirements for accessing the railway infrastructure in EU Member States, e.g. rules on licensing of railway undertakings, the allocation of infrastructure capacity, calculation of charges for the use of the infrastructure,

¹ “Customers” in this document refers to “railway undertakings” and (non-RU) “applicants”, as defined in points 1 and 19 of Article 3 of Directive 2012/34/EU. It thus covers non-RU applicants such as shippers, freight forwarders, competent authorities, etc.
² See page 3 of the consolidated Explanatory Report on CUI UR adopted by the OTIF General Assembly, AG 12/13 Add. 8 of 30.9.2015.
³ See Article 5bis of the CUI UR.
⁴ OJ L 343, 14.12.2012, p. 32.

prohibition to transfer allocated paths, an obligation of infrastructure managers to publish the conditions for access to their networks in the form of a network statement, etc. It applies to the use of railway infrastructure for domestic and international rail services. The provisions of the Directive have to be transposed and implemented by all EU Member States; as a number of provisions only lay down principles/objectives, Member States are entitled to define at national level detailed rules to meet these principles (e.g. national capacity allocation frameworks).

Contractual relations between infrastructure managers and their customers are referred to in Articles 28 and 44 of the Directive, which require railway undertakings and infrastructure managers to conclude “the necessary agreements under public or private law” regarding the use of the infrastructure. The conditions governing such agreements have to be non-discriminatory and transparent, in accordance with the Directive. Moreover, the Directive entitles non-RU applicants to conclude agreements with the infrastructure manager to reserve capacity to be used by a railway undertaking to be appointed at a later stage by the non-RU applicant.

While the Directive does not contain any further provisions defining in detail the content of contractual relations between infrastructure managers and their customers, the extensive set of binding rules on access to/use of the infrastructure laid down in the Directive effectively results in a significant limitation of the contractual freedom of the parties.

- **Directive 2016/798/EU on railway safety**

Directive 2016/798/EU⁵ (“the Safety Directive”) sets out the principles for issuing, renewing, amending and restricting or revoking safety certificates and authorisations. The safety certificate is a precondition to operate rail transport services in the EU, which is also reflected in the CUI UR, Directive 2012/34/EU and contracts between infrastructure managers and their customers.

OVERVIEW OF THE CONTRACTUAL FRAMEWORK FOR INTERNATIONAL RAIL TRANSPORT

The design of contractual relations for the operation of international rail transport is currently characterised by a multitude of different approaches. However, it appears that the following three elements are very common constituents (“building blocks”) of the contractual relations between infrastructure managers and their customers:

CONTRACT OF USE OF THE INFRASTRUCTURE

Firstly, as required by Article 28 of Directive 2012/34/EU and Article 5 of the CUI UR, infrastructure managers usually conclude a contract of use of the infrastructure with the railway undertaking operating the rail transport service. In addition, contracts for reservation of capacity are concluded by a number of infrastructure managers with non-RU applicants (e.g. shippers, freight forwarders, public authorities). The terms of

the contract are agreed between the infrastructure manager and the railway undertaking. In EU Member States, the principle of non-discrimination enshrined in Directive 2012/34/EU always has to be complied with.

Currently, there is no agreed standard for contracts of use of the infrastructure for international rail transport operations. Most infrastructure managers have designed their own standard contract of use of the infrastructure; in many cases, a template for such a contract is included in the network statement of the infrastructure manager. The scope and level of detail of provisions included in these contracts vary considerably. However, the infrastructure managers of the Scandinavian – Mediterranean Rail freight Corridor (“ScanMed RFC”)⁶ are about to launch a trial offering a standard contract of use of the infrastructure to railway undertakings operating on their Corridor. In addition, RNE developed a template for such a contract in 2004⁷ and is currently discussing with CIT the possibility of designing a new version.

GENERAL TERMS AND CONDITIONS FOR THE USE OF THE INFRASTRUCTURE

Secondly, most infrastructure managers have defined a set of general terms and conditions for use of the infrastructure, which form part of the contractual relationship with their customers. The CUI UR provide a framework for the development of general conditions for use of the infrastructure (“GTC-I”). While GTC-I are in principle unilaterally

defined by infrastructure managers, CIT and RNE, with the support of CER and EIM, have developed a set of European General Terms and Conditions of Use of Railway Infrastructure (“E-GTC-I”)⁸. Infrastructure managers are free to decide on whether to apply the E-GTC-I or national GTC-I. So far, only a limited number of infrastructure managers are applying/offering the E-GTC-I. National GTC-I vary in scope, even though they are in a number of cases inspired by the E-GTC-I. Different approaches are currently chosen to make GTC-I part of the contractual framework. Some infrastructure managers include GTC-I in the text of the contract of use of the infrastructure, others include them in their network statement, yet others include GTC-I partly in the contract of use and partly in the network statement. Some IMs also include the GTC-I in dedicated documents, which are annexed to the contract of use or made part of the contractual relations by references in the contract.

NETWORK STATEMENTS AND CORRIDOR INFORMATION DOCUMENTS (FOR EU MS AND COUNTRIES HAVING TAKEN OVER EU RAIL ACQUIS)

Thirdly, many infrastructure managers refer in their contract of use of the infrastructure or the general terms and conditions to the network statement and/or Corridor information document.

According to Article 27 of Directive 2012/34/EU, each infrastructure manager in the EU is obliged to publish a network statement setting out the nature of the infrastructure which is available to railway undertakings. In addition, the network statement must contain the conditions for access to the relevant railway infrastructure and to service facilities connected to the network of the infrastructure manager as well as for supply of rail-related services offered in such facilities.

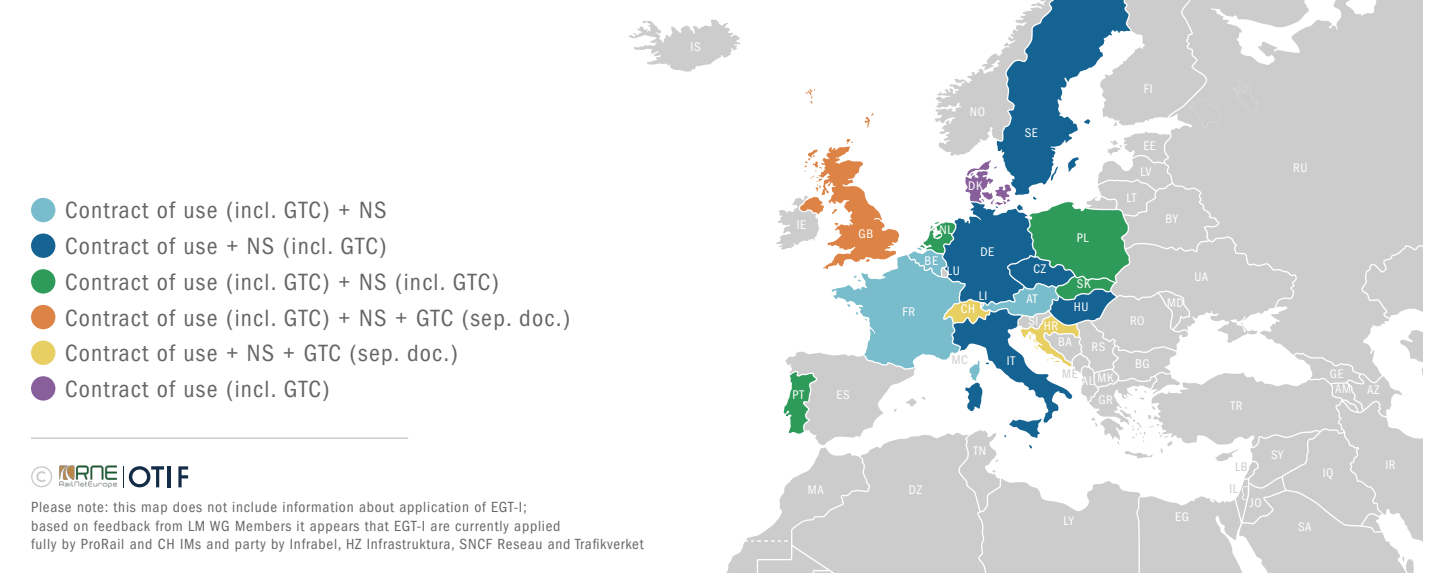
The network statement is

developed by the infrastructure managers and is subject to consultation with the customers. There is currently no common understanding among infrastructure managers as to whether the network statement is legally binding or not. A number of infrastructure managers consider the network statement as the general terms and conditions for access to their infrastructure; others use it as the extended part of the contract, while some only refer to it as information documents.

In addition to the network statement, Regulation (EU) No 913/2010 requires infrastructure managers to draw up an information document for rail freight corridors established in accordance with that Regulation (“Corridor information document”). This document has to contain all information from the network statements that is relevant to the Corridor as well as additional information on Corridor-specific procedures (e.g. allocation of capacity offered by the Corridors).

December 2019

STAU QUO: DIFFERENT MODELS
(based on results of survey with RNE LM WG Members)



⁵ OJ L 138, 26.5.2016, p. 102.

⁶ Rail freight Corridors are set up in accordance with and governed by the rules of Regulation (EU) 913/2010 on a European rail network for competitive freight (OJ 276, 20.10.2010, p.22).

⁷ The template of the standard contract of use is available at <http://www.rne.eu/wp-content/uploads/RNE-Standard-Contract-of-Use-Version-2004.pdf>.

⁸ The E-GTC-I are available at <http://rne.eu/legal-matters/egtc-i/>.

<p>An overview of the approaches chosen to combine the different “building blocks” shows the variety of solutions currently applied⁹:</p> <p>A discussion within RNE’s LM WG has shown that there is not only a variety of different structural models currently being applied, but there is currently not even a common understanding of the typical content of the “contract of use” and of “general terms and conditions”. Content that is included in the “general terms and conditions” in one country is not necessarily considered as part of the “general terms and conditions” in another country (e.g. in one country, certain regulations are perceived as generic content of the NS, while in another country the same regulations form part of the GTC-I). The same applies to the content of the contract of use. Therefore, in addition to the already big variety of models, even countries applying one and the same model do not necessarily have the same understanding of the topics to be addressed in each of the different “building blocks”.</p> <p>As a consequence of the different approaches chosen to design the contractual relations and of the close interrelations between the documents constituting the contractual framework between infrastructure managers and their customers, it appears that the three “building blocks” presented above need to be treated as a package when tackling the fragmentation of the contractual relations for international rail transport.</p>	<p>EXPECTED BENEFITS AND POTENTIAL CHALLENGES OF HARMONISATION</p> <p>A harmonised contractual framework for use of the infrastructure in Europe could undoubtedly significantly facilitate the operation of international rail transport services. It would contribute to the establishment of a truly single European rail area and could help to foster the development of international freight and passenger services. It can be assumed that a harmonised contractual framework could generate savings for both infrastructure managers and their customers.</p> <p>At the same time, when approaching the harmonisation exercise, the following potential challenges need to be considered:</p> <ul style="list-style-type: none">- National legal frameworks and regulatory bodies’ decisions can constitute obstacles to harmonisation. Results of a survey conducted among RNE Members show that in some countries, national law defines mandatory content of the contract of use of infrastructure, and/or regulatory bodies have issued binding decisions on the structure and content of these contracts. These constraints need to be taken into consideration in defining and assessing potential options for harmonisation.¹⁰	<ul style="list-style-type: none">- Positions of key stakeholders on the need for further harmonisation in this domain are not always aligned. Actors such as OTIF, UIC and railway undertakings operating international transport services aim at harmonisation, whereas some infrastructure managers and some customers would prefer to maintain their current models which have been developed (sometimes together with national regulatory bodies) over years. Member States, as owners of most (main) infrastructure managers, and at the same time national lawmakers, have to implement binding international and EU law, but often want to preserve room for national specificities.- Different organisations are willing to work on harmonising the contractual framework for international rail transport (e.g. OTIF¹¹, CIT¹², RNE, UIC, UNIDROIT, the rail freight forward initiative¹³). <u>Alignment, rather than competition between the work undertaken at the various levels, seems crucial for a successful outcome of the different initiatives.</u>- Existing EU law leaves room for different organisational set-ups of infrastructure managers (under public law/under private law), varieties in implementing certain processes relevant to the design of the contractual framework or for national
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⁹ The information contained in the Chart is based on the replies to a survey conducted among RNE Members. RNE cannot guarantee the accuracy of the information provided by its Members.

¹⁰ While it is very challenging to get a complete picture of such constraints, a survey to which 16 of RNE’s Members responded has shown that specificities in national laws exist. However, in most cases it appears that these constraints could be overcome by, for example, leaving some flexibility in harmonised documents and possibly involving regulatory bodies in the harmonisation exercise.

¹¹ See document SG-18046-AG 13/17 of 25.5.2018 concerning the OTIF working group of legal experts, which suggests that the working group should support the sector in establishing a uniform legal framework for using international train paths following the model of the GCU.

¹² See CIT Info No. 2/2019, p. 9; https://www.cit-rail.org/media/files/public/cit-info/2018/cit-info_2018-4/cit_info_2_2019_de.pdf

¹³ See “30 by 2030 rail freight strategy to boost modal shift” published by the rail freight forward initiative: <https://www.railfreightforward.eu/sites/default/files/downloadcenter/whitepaperludupdated.pdf>, p. 21.

<p>legal provisions/regulatory bodies’ decisions limiting an infrastructure manager’s contractual freedom. All these elements (may) have an impact on infrastructure managers’ ability to follow a harmonised approach in designing the contractual relations with their customers.</p> <ul style="list-style-type: none">- A first prototype of a single contract was developed by the infrastructure managers from Sweden, Denmark and Germany for the route from Älmhult in Sweden to Duisburg in Germany for the trains of IKEA Rail in the early 2000s. However, it was discontinued due to its limited added value. In fact, despite signing a single contract, the national GTC-Is and/or network statements of each infrastructure manager remained applicable. Moreover, the single contract covered the international train service; however, for any additional national rail transport operations, the railway undertaking needed to sign additional national contracts with each infrastructure manager concerned.- The model contract of use of the infrastructure developed by RNE in 2004 (on the basis of the contract developed for IKEA Rail) was rarely used. The start of the current trial of a standard contract of use on RFC ScanMed was delayed due to unexpected hurdles from the ministerial side (related to the governance structure of one of the infrastructure managers involved). The model standard contract will be made available by the C-OSS for railway undertakings ordering PaPs and feeder- and/or outflow-paths offered by RFC ScanMed. It needs to be noted that in addition to the standard contract, national network	<p>statements and/or GTC-I will remain applicable.</p> <p>RNE’S VISION FOR APPROACHING THE HARMONISATION CHALLENGE</p> <p>Based on a first analysis of potential benefits, risks and constraints, RNE considers that the current fragmentation of the contractual relations for international rail transport should be addressed in the following way:</p> <p>STEPWISE APPROACH</p> <p>Given the current diversity in approaches for combining the different elements of the contractual framework, a stepwise approach seems to be the most promising road towards harmonisation of the contractual framework:</p> <ol style="list-style-type: none">1. As a first step, there is a need to develop a common understanding of the scope/typical content of each constituent of the contractual framework (i.e. contract of use of infrastructure, GTC-I and network statement), taking into account the relevant provisions of international law (CUI UR for the contracts of use/GTC-I) and EU law (in particular Directive 2012/34/EU for the network statement).2. Such common understanding can then be translated into common structures for contracts of use, general terms and conditions and the network statement. RNE has learnt that common structures such as the Network Statement or Corridor Information Document Common Structure can already significantly facilitate the orientation of customers. The common structure of the network statement and the E-GTC-I that already exists can	<p>provide valuable input to this work.</p> <ol style="list-style-type: none">3. As a third step, the benefits and potential challenges of implementing one common model for assembling the different constituents (i.e. implementation of one of the types shown on the map above) should be assessed. In this context, the potential benefits of combination of some of the constituents (e.g. merging of GTC-I with network statement or contract of use) should also be considered. Based on the outcome of that assessment, the sector should agree whether to pursue this objective.4. As a fourth step, it should be assessed to what extent it is feasible and meaningful to develop common text for contracts of use and general terms and conditions, taking into account differences in national legal frameworks and current practices. In this context, the (potential) relevance of supporting international/EU legislation should also be discussed. <p>SECTOR DRIVEN</p> <p>Experts in charge of designing and concluding contracts within their relevant organisations (infrastructure managers and railway undertakings/applicants) seem best placed to identify solutions that can properly address current problems and at the same time be successfully implemented. Even if it cannot be excluded that the sector encounters obstacles, which it might not overcome without the support from lawmakers, the harmonisation process should nevertheless be initiated and driven by the sector.</p> <p>RNE expects first results from its project aimed at harmonising the contractual framework for international rail transport, such as</p>
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a proposal for a common structure for the three constituents of the contractual framework (i.e. contract of use of infrastructure, GTC-I and network statement) to become available in 2020.

In parallel, RNE is engaging with CIT on the topic and is closely following the planned trial of a standard contract of use on the Scan-Med RFC.

CONCLUSIONS

As this article shows, today the contractual framework for

international rail transport is characterised by a large variety of different solutions, which constitute a major challenge for the development of international rail transport. RNE has undertaken a first attempt to analyse the status quo and to identify possible ways forward to tackle this fragmentation, taking into account the existing legal framework and ongoing initiatives in this regard. RNE considers that a sector-driven, stepwise approach, which looks at the broad picture of contractual relations, i.e. not only the contract of use as such, but also general terms and conditions and the

network statements, is needed to address the harmonisation challenge.

RNE is prepared to take an active, leading role in the process of harmonising the contractual framework for international rail transport and to pursue its vision in close exchange with other organisations at European and international level (including OTIF's working group of legal experts).

Elisabeth Hochhold
Dr. Peter Rónai



CONCLUSION



Clio LIÉGEOIS
OTIF Ad hoc Committee on Cooperation,
Revision Committee - Chair



Christophe LE BORGNE
OTIF Committee of Technical
Experts - Chair



CAROLINE BAILLEUX
OTIF RID Committee of Experts -
Chair

For a paradigm shift in the rail sector: resolutely international and feminine



It was a great honour and pleasure for me to be invited by the OTIF Secretariat to present the conclusions at the end of the Vilnius Symposium in my capacity as Chair of the Revision Committee and the ad hoc Committee on Cooperation. The aim of my contribution in this respect was to identify the lessons learned from the round tables that were held during the symposium so as to derive proposals from them for the work programme of the above-mentioned bodies, in order that the discussions that took place throughout the day can provide fuel for OTIF's future work.

I therefore began by thanking the Secretariat for its kind invitation and by expressing my satisfaction at being able to take part, together with my counterparts who chair the RID Committee of Experts and the Committee of Technical Experts, and the Secretary General of OTIF, in the only panel at this

symposium on which both men and women were equally represented. I expressed my regret at the fact that on this very interesting day, despite the presence of numerous female participants, the panel members who had spoken were exclusively men. As part of the DG MOVE “Women in Transport” initiative, I therefore invited listeners to give some thought to giving women more encouragement to participate actively in this type of event in order to strengthen diversity in the rail sector and contribute to broadening the discussion.

The Vilnius Symposium gave us the opportunity to be informed about past developments in international railway law, with a look back at the history of the Vilnius Protocol and the radical change it represented. We were also informed of what is happening now in terms of recent developments in this law, particularly the changes that the forthcoming entry into force of the Luxembourg Protocol will bring, as well as looking ahead to the future by contributing ideas that might form the basis of OTIF's future work. It was in this framework that my role as Chair of the Revision Committee and the ad hoc Committee on Cooperation led me to speak in order to explore the conclusions to be drawn for the work programmes of these two bodies.

Against this background, I wished to underline the fact that the work OTIF carries out is aimed mainly at meeting the requirements of the rail sector, which is the primary user and beneficiary of the provisions of COTIF and its appendices, which are intended to organise the legal framework applicable to international rail transport. It is therefore important that the subjects and studies dealt with by the organs of OTIF are appropriate in terms of issues that have an added value likely to encourage international rail transport. In my view, the rail sector, which is still very much organised around its national components, and hence the positions which are taken, focus on these aspects, but rarely go beyond national considerations. I therefore urged representatives of the sector who attended the symposium to think more about international requirements and to participate actively in deciding the priorities for the bodies that I have the honour of chairing. To this end, I expressed the wish to be able to open these bodies to sector representatives in the near future and thus to give it a voice so as to direct the decisions taken by providing an insight based on practice.

Clio Liégeois

“Digitalisation: a future challenge for attractive international rail transport”

Twenty years have already passed since the Vilnius Protocol and the ratification of the Convention concerning International Carriage by Rail (COTIF 1999). Last October, OTIF organised a symposium in the capital of Lithuania to bring together representatives of the railways and European institutions. The aim of the symposium was to provide an update on the situation of rail transport, recall achievements in this area and discuss the new challenges that have to be faced.

According to the latest statistics from Eurostat, the proportion of freight carried by rail in the EU has not increased for years, compared with the other land transport modes (road and inland waterways). It stood at 17.3% in 2017, i.e. around 4 times less than for road transport. In the current context of the battle against global warming, how can this stagnation be explained when rail transport remains the most ecological mode of transport? In fact, rail transport with electric traction emits up to 27 times less CO₂ than road transport. According to the Swiss Federal Railways' “ecomparator” application, a train journey from Zurich to Geneva saves up to 50 kg of CO₂ gas compared to a car. Moreover, wheel/steel rail contact and particularly the low rolling resistance offer greater transport capacity for less energy consumption. In general, rail transport consumes up to 6 times less energy than road transport. A single freight train can take around fifty lorries out of road traffic!

Despite all these advantages, it is clear that international rail transport lacks appeal. The causes are well known: technical, administrative and legal barriers that make this mode of transport more restrictive

and hence less competitive. Speakers at the symposium did not hesitate to emphasise the problems they encounter in international rail transport. For example, the European Chemical Industry Council (CEFIC) criticised the weak coordination between rail transport actors in the logistics chain. The International Union of Wagon Keepers (UIP) referred to cases where it is more expensive to cross the border by train than by lorry.

Since it was founded in 1893, OTIF has played a predominant role in harmonising the regulations governing international rail transport. COTIF 1999, which is a real toolbox available to the States parties, today covers three areas of activity: rail transport law for the carriage of goods and passengers, regulating the carriage of dangerous goods (RID) and interoperability. COTIF has been able to adapt to the sector's requirements and now provides three levels of integration of rail transport thanks to international contracts of carriage of freight and passengers by rail, the exchange of railway vehicles at the border and, lastly, interoperability. The interoperability aspect was introduced in 2011 following the accession of the European Union to COTIF. It reflects the highest level of integration of international rail transport and makes it possible for trains to run without having to stop at borders. Appendices F (APTU) and G (ATMF) to COTIF are now dedicated to interoperability and contain a total of about fifteen documents concerning, among other things, the Uniform Technical Prescriptions (UTP) on rolling stock and rules and specifications on the national vehicle register and entities in charge of maintenance. A new Appendix H (EST UR) concerning

the safe operation of trains in international traffic was passed at OTIF's last General Assembly. The working group of technical experts (WG TECH) is also preparing new UTPs relating to infrastructure.

In terms of European legislation, a major change occurred last year with the introduction of the 4th Railway Package (technical pillar). Since 16 June 2019, the European Union Agency for Railways (ERA) has been the central authority responsible for issuing single safety certificates, vehicle authorisations for placing on the market and ERTMS trackside technical approvals in the EU. The 4th Railway Package (TP) already applies in eight EU Member States, including France and Italy. The other Member States plan to transpose the new legislation into their national law by no later than 16 June 2020. After one hundred days in operation, ERA had already received numerous requests via the one-stop shop: 172 requests for vehicle authorisations, 8 others concerning safety certificates and 3 requests for ERTMS trackside project approvals. ERA's new competence will in due course simplify and speed up requests for authorisation and will ensure harmonised deployment of the ERTMS trackside system throughout the EU.

Technology and innovation have always played a prominent role in resolving problems of interoperability in the rail system. In the area of power semi-conductors for example, the increased performance of IGBTs has led to the advent of multi-system locomotives, which today run from northern to southern Europe by adapting to the four main supply voltages of the European

rail network. Another example is the European Train Control System (ETCS), which is being deployed in the EU and beyond (most notably in China) and which is gradually replacing the so-called class B national systems. The ECTS unifies the system for controlling train movements and, with level 2, harmonises railway signalling across Europe. With regard to telecommunications, the new FRMCS (future railway mobile communication system) standard will supersede the GSM-R system and deliver considerably better performance in terms of volumes and data transmission speeds, thanks to 5G technology. According to UIC, 5G technology, linked to artificial intelligence, is going to pave the way for the digitalisation of rail transport (Internet of Things)

and will in particular enable interconnection with the other modes of transport. Digitalisation, which has overwhelming support from the sector, is becoming a major challenge in terms of making the rail system homogeneous. Among other things, it opens up new ways of simplifying and connecting processes, obtaining information in real time and facilitating decision-making. **Digitalisation must make the railways more agile and competitive.**

In conclusion, the transformation of the rail sector will continue and speed up in the next few years, particularly with the digital revolution. More significant investment will be necessary to support the EU's "Green Deal"

policy, for example. The European rail sector's "30 by 2030" aim plans to double the modal share of rail freight transport in the next ten years! As in the aviation and maritime sectors, English will certainly prevail as the common language in international rail transport. Within the EU, there will be calls for ERA to strengthen its centralising role in the fields of interoperability and safety. All these changes will require OTIF's cooperation and the EU's collaboration to adapt the international rail transport regulations. OTIF must prepare for the challenge of digitalisation, because it will probably have to integrate the new situation into its sphere of activity.

Christophe Le Borgne

The Regulation concerning the International Carriage of Dangerous Goods by Rail (RID): an example of intermodal and geographical interoperability

At the symposium, RID was several times referred to as an example of regulations that ensure safety and interoperability in the carriage of dangerous goods by rail.

This is why, at the conclusion of the symposium, the various mechanisms that have led to this success were underlined.

The high level of safety is obtained by complying with the very precise provisions, which have been published step by step since 1893! **Over the years, RID has evolved on the basis of experience and scientific and technical progress. The participation of organisations from across the industry, such as UIC, UIP and CEFIC, has played a large part in this success.**

Interoperability is ensured from the perspective of intermodality and from a geographical perspective.

THE INTERMODAL ASPECT

Intermodal interoperability is ensured by harmonising the rules with the United Nations Recommendations on the Transport of Dangerous Goods (the Model Regulations). All the modal regulations for the carriage of dangerous goods (IMDG for maritime transport, ICAO for aviation, ADR for road transport and ADN for inland waterways) are harmonised with these Recommendations. Every two years, harmonisation work is

carried out by all the committees with responsibility in this area in order to align with the new version of the Model Regulations. In addition, for land transport, a joint RID/ADR/ADN meeting is organised twice a year by OTIF and the UNECE. This meeting mechanism and cooperation between OTIF and UNECE ensures harmonisation between the regulations for the different transport modes, particularly with regard to the classification of dangerous goods, packing requirements and tank construction requirements.

THE GEOGRAPHICAL ASPECT

In the OTIF area, 44 states have acceded to RID.

Harmonisation work is also carried out with OSJD. Harmonisation between SMGS Annex 2 and RID is a fixed item on the agendas of the two committees (RID and OSJD). The secretariats' joint participation in these meetings and the active participation of delegates from countries involved in transport in the two geographical zones ensures that there is progress in the work on harmonisation.

Within the European Union, RID has been carried over as an annex to Directive 96/49/EC on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail, which was subsequently replaced by Directive 2008/68/EC on the inland transport of

dangerous goods. This directive requires the Member States of the European Union to comply with RID for transport between the Member States and for national transport. As a result, national rules have gradually disappeared.

THE RAILWAY ASPECT

It has to be ensured that RID and the general railway regulations are consistent. This is assured by the participation of specialist experts from the European Union Agency for Railways and the European Commission in the RID Committee of Experts' working groups. A joint coordinating group of experts (JCGE) has also been set up. This is jointly organised by OTIF and the European Commission's Directorate-General for Mobility and Transport. This group, which brings together experts from the rail sector and the transport of dangerous goods sector, makes sure that the decisions taken by OTIF's RID Committee of Experts and the European Commission's Dangerous Goods Transport Committee on the one hand, and by OTIF's Committee of Technical Experts and the European Commission's RISC Committee on the other, remain consistent.

OTIF's active role in all these processes, as well as the competence and professionalism of its staff, have been welcomed.

Caroline Bailleux



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The Bulletin editor