wascosa

No 42

INFO LETTER

11|24

NEWS FOR THE FREIGHT WAGON INDUSTRY.

IN FOCUS: INTERNATIONAL AND COUNTRY-SPECIFIC CHALLENGES IN EUROPEAN RAIL FREIGHT TRANSPORT

Successes open up new opportunities

By 2030, the re-imagined rail system is expected to become the backbone of European land transport. Achieving this will require profound changes across the entire rail industry. Challenges must be addressed collectively. However, discussing the successes in international rail freight transport is equally important.

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The list of challenges in international rail freight transport is extensive.

GILLES PETERHANS
SECRETARY GENERAL, UIP

Dear readers,

we're pleased to present the first edition of our newly redesigned Wascosa newsletter. After many years, we've refreshed our look while remaining true to our corporate identity and values.

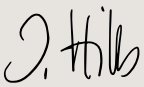
Our refresh demonstrates that Wascosa continues to evolve.
This is also essential for international rail freight transport. In this issue, we address Europe and the regulatory framework conditions for rail freight transport. Gilles Peterhans starts with a feature article on the successfully implemented improvements of recent years, which should inspire us to stay engaged and to pursue further optimisations together and with renewed vigour.
The range of topics is vast: from cross-border freight transport challenges from a European and British perspective (starting on p. 5-6), to the availability of rail infrastructure (p.12), to language barriers in rail operations (p. 14). All articles highlight problems and solutions.

Additionally, in this issue, we once again present innovations from the world of Wascosa, which, as always, focus on the benefits for our customers. This includes our proven Wascosa flex freight system®, which has been successfully used at BASF for years (p. 19), and the automatic tarpaulin solutions developed with customers and partners for efficient steel transport (p. 22). Furthermore, Wascosa is investing in the latest technology developed by TX Logistik: The NiKRASA platform version 3.0 supports the shift of freight logistics to rail (p. 18).

2024 is a very special year for Team Wascosa. On the one hand, we will celebrate our 60th anniversary; on the other hand, Wascosa and AvesOne will become the Wascosa Group. Philipp Müller, Chairman of the Board of Directors for the Wascosa Group, describes the company's impressive journey in his article on page 20.

We hope you enjoy reading this issue and find it inspiring,

Iris Hilb:



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The list of challenges in international rail freight transport is extensive. Have we achieved nothing over the past two decades? What if we tried to see the glass as half-full instead of half-empty? Could it be that we undervalue what has already been accomplished? The fact is: If we don't recognise our achievements, we risk a complete imbalance between negative and positive voices.

New European structures

In Europe's diverse community of states, railway systems were designed and developed nationally. As early as the 1990s, solutions were sought to revitalise rail freight transport. After four railway packages and a variety of initiatives aimed at improving competitiveness, there have been some success stories. At the very least, they have ensured that rail has retained its market share to date. The first package in 2001 established, among other things, a system for non-discriminatory access to railway infrastructure. The second railway package followed in 2004, leading to the establishment of the European Union Agency for Railways (ERA) as a regulatory body. Today, the ERA serves as a central point for issuing vehicle approvals, ERTMS route authorisations and cross-border safety certificates. Of course, it will take time to reach the objectives of reducing approval time and costs by 20 percent. But there is no doubt that Europe needs more of these processes. ERA plays a central role in strengthening rail transport safety and interoperability in Europe. Indeed one of the successes achieved by ERA is the alignment of national regulations for approvals.

Together, it's easier

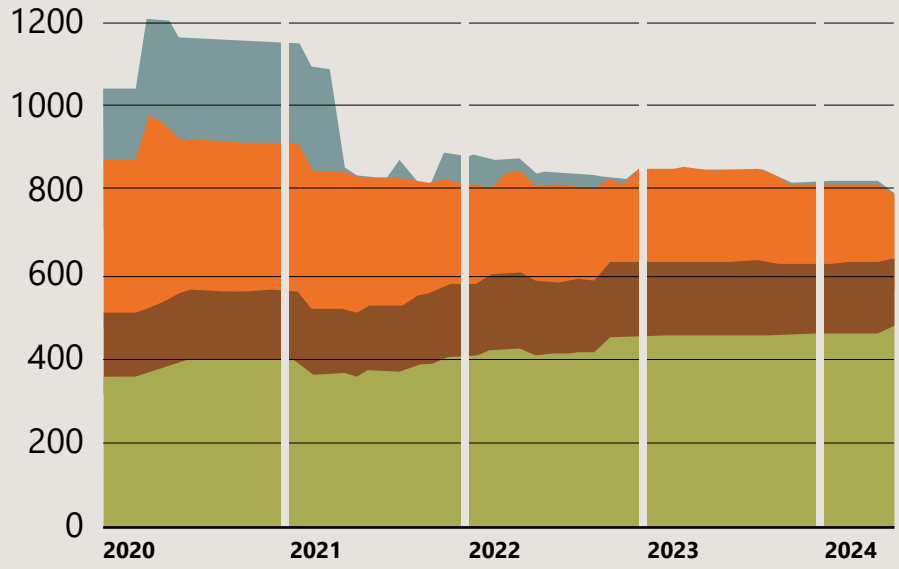
The liberalisation of the system enabled the three associations, UIC, UIP, and EFRA, to create a common basis for the use of wagons: The GCU (General Contract of Use for Wagons). Together with COTIF 1999, this contract took effect on 1 July 2006 and still forms the foundation of operational business for around 500 RUs and 300 wagon keepers. With the experience and suggested improvements from the contracting parties, this multilateral contract has been updated annually for almost 20 years.

In 2018, as the trend toward digitalisation began, the GCU (General Contract of Use for Wagons) promoted multilateral digital data exchange to improve efficiency in processes and speed up information processing. The GCU Broker (see https://gcubureau.org/gcu_broker) provides RUs and wagon keepers with a central communication platform that acts as a one-stop shop, simplifying the exchange of operational and technical information for both parties. The GCU is therefore fundamental for safe and competitive rail freight transport and, by extension, for a successful change in the way transport works.

Reinventing ourselves

Major infrastructure issues shape our daily lives. Our sector has already been heavily engaged in these matters and will need to work at full speed on them in future. Another key area of action is the adaptation of production processes and the comprehensive technological innovation associated with rail freight transport. The European Union recognised early on that rail transport has limited

National rules for wagon approvals are being reduced



Development of national rules
National Rules (NR) are requirements that apply only within a single EU member state. The objective of the EU Commission is to create a unified European railway area that is as free as possible from national regulations.

NRs currently being analysed by the ERA.

NRs that need to be abolished.

NRs, required for other (legal) reasons that must not affect rail interoperability.

NRs that can stay.

innovative capacity and is barely able to realise its potential. As early as 2010, the EU proposed consolidating the three most important instruments for research and innovation into a unified strategy for research and innovation. These include the Seventh Framework Programme, the Competitiveness and Innovation Programme, and the European Institute of Innovation and Technology (EIT).

> The rail market share should be raised to 30% by 2030 and doubled by 2050.
>
> GILLES PETERHANS
> SECRETARY GENERAL, UIP

In January 2014, Horizon 2020 was established as a unified strategic framework for research innovation and technological development. This had a significant impact on the rail industry and led to the creation of the Shift2Rail joint venture. This public-private partnership represented a new form of collaboration among stakeholders across the entire rail transport value chain, with substantial participation from industry. Progress has also been made with the new Europe 's Rail partnership under Horizon Europe to foster innovation in rail freight transport (see https://projects.rail-research.europa.eu/eu-rail-fp5) and to bridge the gap between research and the market through the System Pillar.

The creation of the ERA, the GCU, and Europe's Rail are just three of the many examples. They drive us forward and allow us to speak positively about rail freight transport and ourselves. Talking about success opens up new opportunities, fosters unity, and rekindles enthusiasm for rail.

Achieving the objective together

The rail market share should increase to 30 percent by 2030 and double by 2050. This requires allowing rail freight transport to excel not only on long-haul and cross-border routes, where it is well-positioned, but also on shorter routes where national specifics need to be considered. Eighty-six percent of goods transported by road in Europe are carried over distances of less than 300 kilometres. Therefore, a touch of subsidiarity and federalism must always be allowed.

By the end of the decade, this re-imagined rail system should become the backbone of European land transport. Achieving this objective requires profound changes across the entire rail industry. If the transport sector succeeds in collaborating more closely and creating added value through promoting innovations, we will move closer to the objective of "greater competitiveness in rail freight transport."

A holistic approach is needed

But let's be honest: It will be challenging to find the right regulatory formula to strengthen the competitiveness of rail freight transport. What is seen as highly valuable and interesting on a cultural, linguistic and geographical level in Europe tends to create drag rather than lift within the rail system. We don't need more Europe and more bureaucracy; we need uniform framework conditions that allow for national differences in network capacity, traffic volume, markets and other factors. We need a holistic approach to ensure interoperability between modes of transport. We need courage to build a more crisis-resilient railway network and to address disruptions in freight supply chains. All this also requires national fiscal policies to be aligned in the long term, beyond economic and political cycles. Finally, we need a forward-looking European transport policy and decision-makers who think in terms of long-term causal relationships, as there is no "one-size-fits-all" regulatory solution. But with coherence, ambition and comprehensive measures from both authorities and railway stakeholders, rail freight transport in Europe will improve.

The path to 30% rail market share - A necessary transformation

Rail as the backbone of safe freight transport in Europe

1 **Ports** The gateway to the world

2 4 **Intelligent infrastructure** Interlockings in die Cloud

3 6 **Integrated in the urban logistics** Combined and multi-modal

2 5 **Digital interlockings, modular systems** Adaptability

4 **Digital platform** New collaboration

7 **Consistent spatial planning** Loading/unloading/transshipping

8 **Digitally networked in the train association**
Full Digital Freight Train Operation (FDFTO)

Source: UIP

Overcoming challenges in cross-border transport

Technical differences, national regulations and inconsistent rules hinder cross-border rail freight transport. But rail offers enormous potential to reduce the impact on the environment and make freight transport more efficient. What solutions are available to move goods more quickly and easily by rail across Europe?

SIMON FLETCHER
Founder and Chief Advisor of
Fletch Rail Advisory

The first national railway systems were developed by national companies according to national requirements. This led to technical stumbling blocks such as different track gauges and loading gauges. Even when the first systems were electrified and mechanical railway signals were replaced by coloured light signals, these improvements were financed by national funders. Once again, national methods and companies came into play. For instance, in some places, there is a single red signal light, while in others, there are two red signal lights. The training of train drivers became only more complicated, and it is hardly surprising that locomotives were swapped at national borders.

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> Rail's strong reliance on national financing sources leads to fragmentation in the sector, complicating the implementation of unified standards.
> SIMON FLETCHER

Physical barriers

Although much has already been modernised, the loading gauge differs from country to country, even if the track gauge is identical (this is different for high-speed rail routes in the UK). Not to forget the working principles and regulations, which were developed according to national requirements and are extremely diverse. When it comes to safety, we encounter the greatest obstacles, as each country follows a different approach. However, the situation is improving and the European Union Agency for Railways (ERA) has developed numerous common objectives and methods. Nevertheless, it is still necessary to appeal to both hearts and minds to enable a broad rapprochement and to clear all barriers once and for all.

Too few standards?

There are even more obstacles in the processes. However, together they can be overcome much more easily. Many in the industry believe that there are too few standards in the railway sector. As someone who has dedicated a large part of my professional life to developing framework conditions and content for standards, I must say that this is nonsense. However, most European and international standards are quickly forgotten in favour of national alternatives. The fact is that the rail sector, as an economic sector, relies on these legal framework conditions for everything that needs approval. The solution would be for the railway sector itself to issue standards for the industry – independently of politics, legally binding and recognised by all. Just like the IATA for the aviation industry. This is easier said than done, but undoubtedly feasible.

Territorial fragmentation

In the railway sector, we are currently dealing with territorial fragmentation. This brings us back to inconsistent national regulations and differing technical standards in the individual countries. However, the rail sector depends on financing sources that are different to those of road and air transport. For the financing of infrastructure and similar projects, it is much more reliant on national financing. Therefore, it is in the nature of things that national solutions come into play.

"Forms Book" Alternative to English

The ERA has taken on the enormous task of acting as the system authority for the mutual recognition of railway vehicles. The improvements focus on the somewhat easier-to-manage freight trains. For example, locomotives

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The linguistic diversity in Europe poses a challenge, especially for communication between drivers.
SIMON FLETCHER

are intended to speed up the process and save the sector (as well as the financing organisations) a lot of money. Once approved, these locomotives can travel across national borders without requiring any adjustments. This should also apply to train drivers despite the different languages. But is that really possible? Perhaps with English as the lingua franca? But why teach all train drivers and signal mechanics English when there are alternatives? During my time at Eurostar, we introduced a "forms book," which is still in use today. It serves as a linguistic reference guide and outlines what to do in various operational situations. From a cost and safety perspective, this is a much more efficient method.

Achieving objectives together

There is ample evidence that rail transport is by far the most environmentally friendly form of land transport. This means that rail must play an increasingly important role in reducing pollution and road congestion by replacing lorries in freight transport. In Europe, the objective has been set of increasing the rail share of freight transport to at least 30 percent by 2030. This is not about building hundreds of kilometres of new tracks but optimising existing infrastructure in the most sensible way possible. Train scheduling, resource utilisation, realistic pricing – not just for the freight-carrying vehicles but also for tracks – faster trains, fewer border controls. These are just a few of the measures that will contribute to achieving this objective in collaboration with willing stakeholders.

About the author

Simon Fletcher has over 30 years of experience in international rail transport. He has worked as a train driver and instructor, authored the International Rule Book for Eurostar, served as Operations Director of a UK railway company and was the Director Europe and Chief Standardisation Officer at the International Union of Railways (UIC).
As the founder and Chief Advisor of Fletch Rail Advisory, he now offers his wealth of experience for various projects.

linkedin.com/in/simon-fletcher.

Strong campaign for rail and the environment

An average train carries the same amount of freight as 129 lorries combined do but produces about 76 percent less harmful carbon dioxide emissions. To highlight the many benefits of shifting transport from road to rail for companies and the environment, DB Cargo UK has launched the campaign "Freight Belongs on Rail." The campaign has now been expanded to international freight transport.

ANDREA ROSSI
CEO DB Cargo UK

To deepen an understanding of the opportunities and obstacles in expanding international rail freight transport, DB Cargo organised a conference entitled "International Freight Belongs on Rail." Amongst the guests were senior representatives from the British Department for Transport, the Department for International Trade, the Great British Railways Transition Team, Channel Tunnel, Transfesa (a sister company of DB Cargo UK) and notable figures from the retail and automotive industries. They took the opportunity to discuss in detail the challenges and opportunities associated with increasing the share of rail freight transport through the Channel Tunnel. Andrea Rossi, CEO of DB Cargo UK: "Expanding our international transport network and establishing new European corridors are amongst DB Cargo's most important strategic objectives. Now is the best time to advance discussions on what changes are needed to achieve these objectives."

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> Expanding our international transport network and establishing new European corridors are amongst DB Cargo's most important strategic objectives.
> ANDREA ROSSI

Toyota trusts in rail

With the route between Toton in Nottinghamshire and Valenciennes in northern France, Toyota became one of the latest companies to advocate for the expansion of international rail freight transport. Trains loaded with around 260 vehicles now run between the two locations twice per week. Previously, this journey took five days by road. By rail, it now takes just 24 hours and reduces Toyota's CO_2 emissions by 2,300 tonnes per year. As part of this project, DB Cargo UK collaborated with Groupe CAT. 2.6 million pounds were invested in the construction of a new vehicle handling terminal. At the same time, a previously unused area of the Toton site was revitalised. Thanks to the collaboration between DB Cargo UK, Groupe CAT and Toyota, an efficient and environmentally friendly rail logistics solution for one of the largest car manufacturers in the world was initiated.

Channel Tunnel as an opportunity

During the conference on international rail freight transport, the obstacles and opportunities associated with increasing rail freight transport through the Channel Tunnel were discussed. This is particularly significant in light of the substantial issues faced by some British ports. A more intensive use of the Channel Tunnel's capacity would bring considerable economic and ecological benefits compared to road and short-sea shipping. There is a strong interest in increasing the volume of international rail freight transport, and DB Cargo is proud to lead a campaign promoting this growth for UK PLC.

The obstacle of exploding costs

Due to rising costs, DB Cargo UK has recently observed a decline in international rail freight transport. Soaring infrastructure costs are hindering a shift to international transport. "External costs for infrastructure are unacceptably high," says Andrea Rossi. "Therefore, we are working together with our partners and stakeholders in the industry to explore all possible mechanisms within the fee framework to create incentives for an increase in traffic and to drive it forward. These costs are currently just too high, and we need to keep in mind the positive examples from our European colleagues, who have established incentives for access charges in rail freight transport."

Capacity as a strategic advantage

Capacity in rail freight transport remains a strategic advantage for DB Cargo UK. Consider the European han-

© DB Cargo UK

dling terminal at Dollands Moor, the fleet of Class 92 locomotives and the extensive corridor of European routes across the entire DB Cargo railway network. The charging system in the UK needs a fundamental overhaul. In the meantime, DB Cargo is seeking support from the new British Labour government to commit to the objective of expanding rail freight transport. For one thing is clear: International Freight Belongs on Rail! ●

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A more intensive use of the Channel Tunnel's capacity would bring considerable economic and ecological benefits compared to road and short-sea shipping.

ANDREA ROSSI

Here is the link to the YouTube Video from DB Cargo UK FREIGHT BELONGS ON RAIL

Reliable freight transport despite infrastructure modernisation

The railway network in Europe urgently needs modernisation. However, stable freight transport must be ensured during construction works. Methods from France, Sweden and Spain demonstrate how this can be achieved.

CONOR FEIGHAN
Secretary-General, European Rail Freight Association (ERFA)

In many European countries, the railway infrastructure is in urgent need of modernisation – especially in Central Europe. In many cases, such as in the German railway network, decades of underinvestment in railway infrastructure need to be compensated for. If investment is lacking, the efficiency and safety of rail transport are jeopardised by the poor condition of the infrastructure. Modernisation measures, of course, involve numerous works on the infrastructure and Transport Capacity Restrictions (TCR). This poses significant challenges for companies in rail freight transport.

The crucial question

For the rail sector, the crucial question is how to future-proof railway networks without sacrificing the existing system. Infrastructure modernisation is pressing. But equally urgent is the need to ensure stable and predictable freight operations. Infrastructure operators must therefore find an appropriate balance between their role as "builders" and their role as capacity managers.

> For the rail sector, the crucial question is how to future-proof railway networks without sacrificing the existing system.
>
> CONOR FEIGHAN
> SECRETARY GENERAL, ERFA

First and foremost, one must recognise the differences between passengers and freight. When routes are closed for freight transport, dispatchers typically look for alternative transport options, as freight cannot simply be transferred to rail replacement buses for a few kilometres, as is the case for passengers in public transport. Therefore, in cases where capacity becomes tight, it is essential to ensure that the socio-economic impacts are assessed via capacity management.

Example: The Gotthard Base Tunnel

The closure of the Gotthard Base Tunnel serves as an example. After a train derailment in the tunnel in August 2023, the Swiss infrastructure operator SBB had to close the western tunnel, resulting in a 50 percent loss of capacity. SBB then decided to keep the undamaged eastern

tunnel open exclusively for freight trains. Meanwhile, passenger trains were diverted over the Gotthard mountain route. This allowed nearly 100 freight trains to pass through the Gotthard Base Tunnel on a daily basis, minimising the risk of traffic backups. This decision was based on a risk assessment for maintaining the flow of goods, which the infrastructure operators conducted as part of their labour and capacity management decision-making process. It is essential that this becomes the norm for dealing with crisis situations, with equal importance given to meeting capacity needs as is given to construction work.

Dependent on international cooperation

Infrastructure operators must consider capacity needs during the planning phase and before finalising schedules for construction works and capacity restrictions. They should aim for at least 80 percent of the freight trains to operate. This would ensure that the impact on capacities is adequately taken into account when infrastructure operators plan their works. In many cases, this will, however, rely on international cooperation and a

Europe-wide strategy. The best diversion route would often run through a neighbouring country. In such cases, European and national regulations should be adjusted to allow deviations from national and European rules, provided national safety authorities deem it safe, especially in cases of crisis-induced route closures. This would allow for maximum utilisation of capacities at a European level. In the case of detouring, it should be clear that the additional costs arising from the longer routes should not be borne by the rail freight companies. In all European countries, track charges are levied for the kilometres travelled. For instance, a detour of 300 kilometres would incur significant, unforeseen costs for railway companies, leading to a destabilisation of overheads in rail freight transport. A change in approach is needed towards a system where rail freight companies only pay for the originally reserved capacities and any subsequently expressed changes.

Various incentive systems in Europe

Ultimately, incentives must be created to ensure two things: That rail freight companies are compensated when capacities are cancelled beyond their control. That changes to reserved capacities are carried out coherently and in a timely manner. Many European countries already have such systems in various forms. In France, mutual business conditions for railway companies and infrastructure operators have been in place since 2015. Depending on how close to departure capacities are cancelled, the penalties in the French system increase significantly. This is intended to incentivise railway companies and infrastructure operators to cancel capacities as early as possible. The steady decline in penalty payments since 2015 shows that this strategy is paying off and that both railway companies and infrastructure operators are managing their capacity bookings better than before.

> « »
> Unlike passenger trains, rail replacement buses cannot be provided for freight trains.
> CONOR FEIGHAN
> SECRETARY GENERAL, ERFA

Sweden has a similar system, where penalties for capacity cancellations increase significantly the closer they occur to departure. As a result, very few trains are cancelled in Sweden less than 90 days before departure. Other member states have proposed alternative methods to support rail freight transport. In 2023, Spain and the Spanish infrastructure operator ADIF jointly developed a proposal for freight transport that provides for a flat-rate compensation per train kilometre in the event of certain TCRs. This system was approved by the European Commission in July 2024 and is expected to significantly contribute to ensuring that infrastructure works do not impose a financial burden on rail freight companies.

Methods already available

There are already methods available that allow for the development of a modern railway infrastructure company without sacrificing freight volumes and the business models of existing rail freight transport. These methods must be applied to establish a more balanced, mutually agreed system that enables the necessary works on the European railway network. **o**

Investing in rail infrastructure: The key to securing the future

Investing in rail infrastructure is investing in future. The success of infrastructure projects is, however, heavily dependent on the availability of machinery and rolling stock. Therefore, ÖBB-Infrastruktur is collaborating with innovative companies like Wascosa.

ERNST STEIGER
ÖBB-Infrastruktur AG

Projects for the renewal of rail infrastructure require thorough planning and comprehensive preparation, as lead times often range from three to five years. During this time, economic and political factors can significantly influence implementation. Challenges such as rising material costs, material shortages and personnel shortages, while multiple projects are ongoing, often lead to delays.

Modern wagons optimise track construction

A crucial factor for the success of infrastructure projects is the availability of machinery and rolling stock. These areas have the highest priority for ÖBB-Infrastruktur. Close collaboration with innovative companies like Wascosa, which develops modern wagons, is therefore particularly beneficial. To optimise track construction, ÖBB-Infrastruktur has leased three gravel wagons of the FANPS type for a long-term test run. These wagons differ significantly from ÖBB-Infrastruktur's existing rolling stock. They are equipped with remote-controlled chutes and flaps, an integrated water spray system and a 360-degree lighting system. These technical systems are operated by a generator that can service up to three wagons simultaneously. To ensure efficient use, thorough training and repeated use of the wagons are necessary. This is made possible by the five-month lease period.

> « »
> Innovative wagons and machinery are crucial for successfully implementing future projects.
> ERNST STEIGER

Innovation enables efficiency

Innovative wagons and machinery are essential for successfully implementing future projects. They enable the construction of new corridors, the renewal of the existing railway network, and the execution of numerous smaller projects necessary for the smooth transport of passengers and goods by rail. When implementing projects, many factors must be considered: How long should a route closure last? Is rail replacement service necessary? What machinery will be used, and how will it be transported to the construction site in time? Comprehensive logistics concepts must be developed for these questions. Furthermore, track access must be ordered in a timely manner to minimise disruption to passenger and freight transport during construction works.

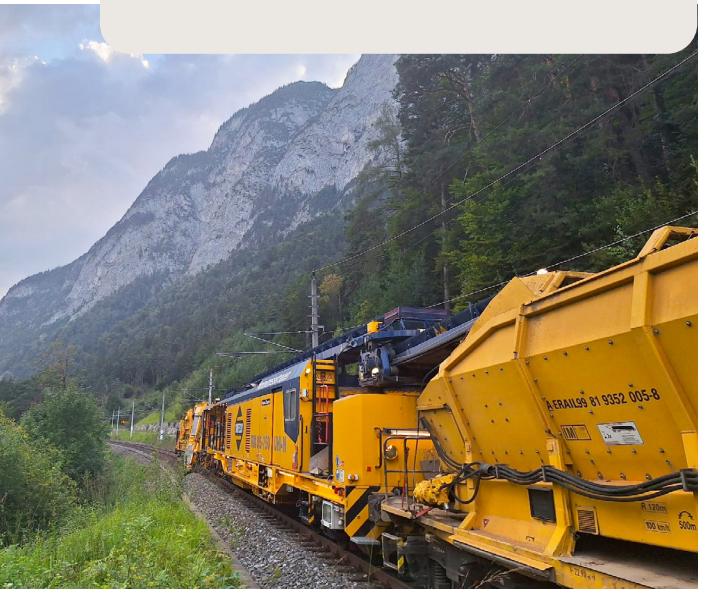
Successful project execution

Once a project has started, it is crucial to continuously monitor processes and transport. When problems arise, quick action is required to ensure that the next construction site can begin on schedule. The machinery and rolling stock are constantly being moved – north to south, east to west – managing numerous construction site kilometres each year. ○

© ÖBB-Infrastruktur AG

The role of ÖBB-Infrastruktur AG

ÖBB-Infrastruktur AG, a subsidiary of ÖBB-Holding AG, is responsible for track allocation, operation and maintenance of the Austrian railway network. Additionally, it plans, designs and constructs rail infrastructure, stations and stops. Founded by the Bundesbahnstrukturgesetz (Federal Railways Structural Act) of 2003 and the railway reform of 2009, ÖBB-Infrastruktur AG is now a central pillar of Austrian transport infrastructure. With 31 stakes in other companies as of 31 December 2017, it remains an important player in the further development of rail transport in Austria.



Video: The automated FANPS 2.0 ballast discharge wagon with anti-dust spray system in action.

English as the working language in European rail operations

From taverns in Greece to airports in South America, English is confidently spoken everywhere. Global air traffic also follows well-defined routine procedures. Cross-border rail operations should take their cues from this. Here we go.

ANDREAS MANDL
COO and CEO at LTE and Adria Transport

I am writing this text while on holiday in Greece. Greek is not an easy language. It starts with the alphabet and even simple words like "ne" mean "yes." In the evening at the tavern, there is a cheerful buzz of voices. Europeans from East and West are enjoying the mild evening weather here. But one thing is common to all: When the waiter comes to the table, English is spoken. No one speaks Oxford English, not even the English themselves! Yet no one goes thirsty or hungry. People understand one another.

English heaven and Earth

Scene change. Some time ago, I had the opportunity to speak with a pilot instructor from an Austrian airline. Naturally, one of my first questions revolved around language: What is it like to work in English? And I also asked how safety is ensured. The answers were clear. In principle, airspace worldwide speaks English. Only air traffic controllers in France and Russia sometimes use their native language for initial contact. Yet the point of the pilots' all speaking English is not to play a lead role in Shakespearean theatre. It goes without saying that, nearly everyone already has a good command of English having studied it to A-Level or Baccalauréat level even if that was a long time ago. But this is no problem, because everything works routinely. For example, the pilot contacts the local air traffic controller at a defined time with the flight number, altitude and direction to request landing clearance. The controller repeats the request and assigns the pilot a runway as well as a landing strip and gate. The pilot repeats this and continues the landing approach. The pilot and the air traffic controller did not simply make up this protocol. Instead, they followed internationally established procedures that are valid for airspace worldwide and all airports. In the past, this was documented in various binders that were carried along (pilot cases!) for the flight. Today, the procedure is read from a tablet. The instructor explains to me that even in case of emergencies, and in these cases in particular, it is important to work within the confines of formulated procedures. This is the only way to ensure that the necessary steps are precisely coordinated to avoid injuries to people or damage to machinery.

> « »
> In Europe, there are over 200 border stations with differing native languages. What could be more appropriate than to introduce a unified language for all borders?
> ANDREAS MANDL

German as the railway border language

Another scene change: The train-loving country of Austria has border train stations with seven neighbouring countries (let's consider Switzerland and Liechtenstein as one). In five of them, in the Czech Republic, Slovakia, Hungary, Slovenia and Italy, German is still spoken at the border stations in spite of a different national language. This is regulated through bilateral state treaties. In the past, it was relatively easy to find personnel with German language skills. After all, the "Eastern bloc" was more interested in tourists from the GDR than in global events. Thus, previous generations up to the current mid-to-late fifties were taught foreign languages such as German or English, alongside Russian. However, the older generation is slowly but surely approaching retirement and will soon leave the active workforce. In Austria, there are also ÖBB employees who have fallen in love with someone from a neighbouring country. They may speak Italian, Hungarian or Czech. And if we're lucky, they are train controllers and can lend a hand. But as mentioned, their numbers are very limited.

There are many arguments in favour of English

Austria is just one example from the heart of Europe. The same applies to the borders between Poland and Germany, Hungary and Romania, Italy and Slovenia, just to name a few examples. Overall, there are a multitude of border stations in Europe with differing native languages. So, what could be more appropriate than to introduce a unified language for all borders? What arguments are there against using English as a common language? English is the only language on the European mainland that is not a national language anywhere. Thus, no country is favoured with "its" language. English is, sorry Mr Shakespeare, relatively easy to learn as a foreign language. Additionally, English is already the preferred primary foreign language in most European schools. And as the saying goes: It is hard to teach an old dog new tricks. Conversely, this means: The earlier I learn a language, the easier it will be for me to speak it later in everyday life. And if I use this language in my daily professional life, and not just on holiday in a Greek tavern, speaking it becomes even easier. This is a sort of added benefit.

High costs for technical solutions

Of course, our corporate group is not the first and only one to consider the topic of "English as the working language." Various international railway organisations, some infrastructure operators, and of course, the railway indus-

try have been dealing with this topic for some time. However, thanks to digitalisation and artificial intelligence, it is not necessary to rely on human know-how alone but to take advantage of technical solutions. A "translator" is supposed to be on every locomotive and with every train controller. No matter what my native language is, my counterpart hears the conversation in their own language. This low-cost variant would be a written input solution instead of direct speech. These solutions are certainly feasible and probably already in the testing phase. But what does this mean for us as railway and infrastructure operators? It means costs that far exceed the benefits achieved. Currently, a locomotive operated internationally costs around five million euros. Reported additional costs of several hundred thousand to half a million euros per locomotive (!) have been mentioned. The effort is justified: Development, approval and installation. A few thousand machines in Europe are indeed just a small number on which to calculate everything. Moreover, each locomotive in international rail operations must be equipped, even if the train currently only runs between Germany and Switzerland. Why? Because perhaps the train will cross the Dutch border next month. Nevertheless, there will be no 100% guarantee of functionality. Network outages, malfunctions, and damaged input/output devices are just a few possible examples.

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A "translator" is supposed to be on every locomotive and with every train controller. This means costs that far exceed the benefits achieved.

ANDREAS MANDL

Investing in language skills

A study has shown that a train driver only needs a "railway specific" vocabulary of around 800 to 1000 words to discuss and describe all possible procedures. This also includes all technical problems. Isn't it therefore more sensible to enhance the language skills of train personnel and train controllers and invest directly in employees? The trade union would be pleased. And isn't it wiser to handle border-traffic within a defined radius using established routines and with English as a working language? No locomotive driver from Bulgaria will therefore compete for a job with a German or Italian train driver. I am still speaking about border regions here. And even if there are complications and the train controller says over the radio: "All trains stop!" then it does not matter what a person's native language is. As a locomotive driver hearing "All trains stop!," the task is to press the red button and come to a halt. A significant advantage that trains have over aviation is that we have all wheels on the ground. We should also be grounded in common sense as well. ○

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A study has shown that a locomotive driver only needs a "railway specific" vocabulary of around 800 to 1000 words to discuss and describe all possible procedures.

ANDREAS MANDL

Andreas Mandl

Is COO and CEO at LTE and Adria Transport, a group of private railway companies with 13 national subsidiaries, where 11 different mother tongues are spoken.

The long road to RFT digitalisation

The digitalisation of rail freight transport (RFT) promises significant advancements, particularly through the use of digital platforms. Despite initial successes, achieving complete standardisation and a seamless digital process for the multitude of actors across national borders remains a challenge. The journey towards comprehensive and efficient digitalisation of RTF is still long and requires a joint commitment and clear standards.

DR. DANIEL ROST
Head of System Architecture and
Digital Programmes at Wascosa

The digitalisation of rail freight transport (RFT) exists in the context of international transport routes involving a wide range of stakeholders. This leads to a steadily growing demand for smooth information exchange. Various programmes, such as DP-Rail (Digital Platform Rail), aim for standardisation and centralised data exchange at an international level. Initial solutions such as RSRD[2] and the GCU Broker represent only partial successes. However, there is still a long way to go before achieving a seamless digital process that efficiently manages RTF across various market participants and national borders.

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First steps toward RFT digitalisation have been taken. Nevertheless, the path is still long and can only be successful if all parties in the sector pull together.

DANIEL ROST

Fundamental challenges

Various factors present challenges, not only operationally but also for digital networking. These include the involvement of different stakeholders in the transport process (customers, owners, railway undertakings and infrastructure managers, ongoing maintenance professionals (ECM and workshops), terminal or connecting track operators) and the establishment of cross-border transport concepts influenced by nationally specific regulations. There are also hurdles to creating the necessary transparency, often due to individual interests, lack of standards and manual processes. Transparency is essential to elevate processes through digitalisation to a level of execution that makes RTF competitive with other modes of transport in future.

Current status

In the sector, manual processes still dominate. The exchange of information via email or even fax is part of daily business. Nevertheless, there are positive examples of successful implementations:

TIS-ITSS-Standard

The exchange of telematics and sensor data has been defined collaboratively by TIS (Technical Innovation Circle for RTF) and ITSS (IEEE Intelligent Transportation Systems Society). It now enables the simple and rapid real-time data exchange between owners, RUs and customers. The standard is consistently implemented throughout the sector.

GCU Broker

In the event of damage to a freight wagon, the RUs using the freight wagon must submit a damage report in standardised form, as defined in the GCU (General Contract of Use for Wagons). This is possible in completely digital

What does data exchange for freight wagons specifically mean?

What?

Technical (master) data and maintenance information, tracking data for trains and wagons, planning data (e.g. Timetables) and use-case related data (e.g. specific sensor information about the load).

Who?

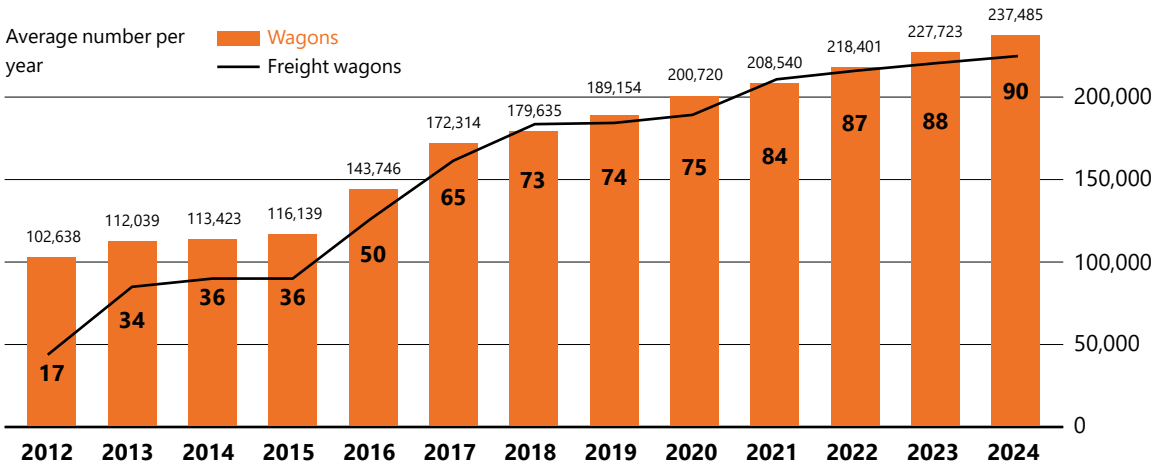
Who is allowed to access data, when, and in what format is usually determined by the contractual relationship (e.g. rental agreement or transport order) and the associated data ownership. Often, the determination of permission is complex, as it must be established based on roles during transport and freight documentation. The definition and implementation of the access concept and its dependence on high-quality real-time data from various sources presents one of the biggest challenges for the implementation of centralised solutions.

How?

With today's capabilities of various cloud services and powerful mobile devices, there is a wide selection of technical tools. Challenges arise less from the availability of technical solutions for a platform and more from the lack of standards and definitions for data content, as well as their integration with outdated or missing IT applications in the sector.

Source: Knorr-Bremse

Development of freight wagon keepers and wagons RSRD²



Wascosa is also committed to future digital solutions that enhance the efficiency of RTF. We are more than open to further development.

DANIEL ROST

form through the GCU Broker (XML-exchange). Unfortunately, only about 10 percent of RUs currently utilise this channel, leading to a high, avoidable manual workload for wagon keepers.

Rolling Stock Reference Database (RSRD²)

This central wagon database provides technical information about freight wagons, primarily for RUs, enabling them to obtain information about planned wagons even before train formation. The database is based on legal requirements from TAF TSI and is widely used in the sector. The involvement of more than 90 wagon keepers with over 240,000 wagons and around 1 million queries per month makes RSRD the most utilised central platform (see info graphic).

Conclusion

With existing implementations like RSRD² and data standards such as the ITSS format, initial steps toward RFT digitalisation have been taken. Nevertheless, the journey is still long and can only succeed if all parties in the sector pull together. Wascosa remains committed to this field in future and is open to further development. ●

Jointly marketing an innovative system

The NiKRASA System 3.0 enables quick and easy loading of non-craneable semi-trailers onto the rail without terminal adapters. To better market this system, TX Logistik and Wascosa will work together more closely in future. The agreement includes an initial order from Wascosa for 125 NiKRASA plates valued at approximately three million euros.

Do you have questions?

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Source: TX

Both partners have been collaborating for many years and aim to forge out in new directions in the intermodal environment with the new framework agreement by simplifying the loadability of the majority of currently operating trailers in Europe onto the rail. "In the current tense market situation, this partnership is a sign that we are looking to the future," says Ugo Dibennardo, CEO of TX Logistik. "In addition to freight wagon leasing and marketing NiKRASA, we also want to work closely on transport solutions and innovative developments, advancing these together with our additional partners."

System accessible to all

Wascosa is also the first partner with whom TX Logistik has entered into a NiKRASA cooperation. The rail logistics company belonging to Mercitalia Logistics (FS Italiane Group) has designed the NiKRASA System 3.0 from the outset to be freely accessible to all market participants and aims to attract further partners in the future. In the words of Ugo Dibennardo: "We want to contribute to achieving climate objectives and ensure that the shift of goods from road to rail is straightforward and possible for all interested parties."

To offer a new standard service

Wascosa is convinced of the potential of the solution. "The NiKRASA solution fits perfectly into our market strategy to create added value for customers in rail freight logistics while also supporting the shift to rail," says Iris Hilb, CEO of Wascosa. "In the future, we will offer the handling system as a new standard service for the rental of pocket wagons to make it easier for shippers to enter the world of combined traffic." Market interest is evident, as more shippers in Europe are faced with the challenge of making their logistics chains more environmentally friendly and economically viable in the future.

Supports Sustainability Strategy

The new partnership also supports Mercitalia's sustainability strategy. "The objective is to permanently expand our offering of environmentally friendly logistics solutions in Europe," says Sabrina De Filipps, CEO of Mercitalia Logistics. "The NiKRASA System 3.0, which is fundamental for the efficiency of terminals, represents a profitable combination alongside the development of intermodal hubs to promote the increase in traffic."

Video: How the NiKRASA platform 3.0 works.

How NiKRASA 3.0 works

The NiKRASA platform enables the loading of non-craneable semi-trailers, which currently account for about 90 percent of European lorry fleets. They can be loaded from road to rail in just two minutes. No changes to existing standards in the terminals, the wagons or the railway are necessary. In addition to conventional tarpaulin trailers, silo structures, mega trailers and trailer chassis can also be transported onto the rail network. If the NiKRASA adapter remains empty in the wagon, interchangeable containers and containers can be loaded as usual without interfering with each other's systems.

Impressive BASF logistics concepts optimised for efficiency

How has BASF managed to make its logistics significantly more cost-effective, flexible and faster? Participants at this year's Wascosa Circle Event in Ludwigshafen found out this first-hand.

Do you have questions?

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The innovative BASF Class Tank Containers (B-TC) have been approved for rail and road transport in Europe since 2015. The central interface of this concept is the fully automated tank container storage system with a capacity of 2,000 TEU. Here, the B-TC are stored and transshipped for space savings more efficiently, securely and cost effectively, and stacked up to six high. The new tank containers are transferred between the rail transport and in-house road transport by self-driving AGV (Automatic Guided Vehicles) from the company VDL.

Reducing in-house transport costs

At the Ludwigshafen site alone, BASF moves around 20 million tonnes of transport volume annually. This is in addition to transport between the plants in Antwerp and Schwarzheide as well as deliveries to customers. A significant portion of the costs is generated by the in-house transport routes. This is precisely where BASF's new logistics concept comes into play. The use of specially developed B-TCs, AGVs and the automated storage system ensures that logistics are now 25 percent more cost-effective, flexible and faster. A clear argument for shifting more goods onto rail.

Replacement for traditional tank wagons

BASF developed the B-TC in collaboration with the Belgian commercial vehicle manufacturer Van Hool. The rail-optimised tank containers come in sizes of 45 and 52 feet. Their volume is comparable to that of a traditional tank wagon. In combination with Wascosa's lightweight, optimised container flat wagons, a system is created that functions almost like a tank wagon with a detachable tank. The B-TCs can hold up to 73,500 litres and have a payload of 66 tonnes, which is approximately equivalent to the volume and loading capacity of an insulated and heated chemical tank wagon. Today, other renowned tank container manufacturers have also included the large B-TCs in their portfolios.

Efficiency in tank container storage facilities

The automated tank container storage facility is equipped with two cranes, each with a loading capacity of 75 tonnes. The innovative tank containers can be safely stored there temporarily while the rail wagons are used for other transports. This reduces the required number of rail wagons. Furthermore, the containers are transported using AGVs – in other words independently of the tracks. This massively shortens the delivery time. For traditional tank wagons, it is around 22 hours, while for B-TC, it is only about 1 hour.

Source: BASF

A combination which creates many advantages

The BASF Class tank container solution fits ideally with the Wascosa flex freight system® (ffs) and significantly enhances productivity and competitiveness in rail freight transport by separating the wagon underframe from the superstructure. The main advantages are:

- Faster and more effective transport and turnaround times
- Reduced equipment costs
- Temporary storage and stackability
- Lower costs and burdens linked to the underframe
- Reduced delivery costs for the last mile
- Easier product changeovers
- Faster and easier procurement of equipment (no time- and cost-intensive approval hurdles)
- Reduced downtime and costs
- Optimisation of Life-Cycle Costs (LCC)
- Trimodal transshipment (AGV, lorry, rail) increasing productivity in combined traffic

Conclusion Become more economical with greater flexibility. BASF clearly demonstrated how this can be achieved.

Video: Wascosa event at BASF.

Becoming the Wascosa Group

2024 is a very special year for Wascosa. On the one hand, Wascosa is celebrating its 60th anniversary; on the other, Wascosa AG and AvesOne are merging to form the Wascosa Group. This will create one of the largest European leasing platforms for freight wagon systems. Looking back at the past shows how the Wascosa Group was formed and what makes it different.

PHILIPP MÜLLER
Chairman of the Board of Directors
of Wascosa Group Holding

The story of Wascosa has always been one of continuing development and change. Our slogan "Going new ways" has been and continues to be what we practice every day. This year, a further fundamental change is underway: The merger of AvesOne and Wascosa AG to form the Wascosa Group – one of the largest rail leasing platforms in Europe.

Numbers underscore strength

A look at the numbers shows where the strength of this group lies: The sum total of all the freight wagons that belong to the Wascosa Group and are leased by Wascosa AG stands at 22,000 railcars. With an average wagon age of 13 years, the Wascosa Group boasts a very young and modern fleet in the standard, tank and intermodal sectors. The Wascosa Group consists of a dedicated and experienced team of 130 employees working from our offices in Lucerne and Hamburg, as well as in all relevant European markets. The two companies from a perfect symbiosis by combining the know-how and experience of a former investor and the fourth-largest rental company in Europe.

Journey into the future

The fact that we can celebrate the merger of the two companies this year is no coincidence. Wascosa was a pioneering and dynamic force when it embarked on a journey into the future 60 years ago. The steady growth of the fleet has been made possible by broadening the types of wagons and increasing our presence throughout Europe. Moreover, numerous innovative concepts in wagon development and digital technologies have been implemented along this journey, which we report on regularly in our infoletter.

The history of AvesOne began in the year 2013. Two years later, the first development in the rail segment was made. The acquisition of the Nacco fleet in Germany in 2018 marked the first collaboration between Wascosa AG and AvesOne. Ultimately, the path to the future was paved with the acquisition of both companies by Swiss Life Asset Managers and Vauban Infrastructure Partners in 2021 and 2022. The two teams have been working hand in hand for a long time. They complement each other excellently in terms of experience and expertise. This all means that the Wascosa Group is very well positioned for future growth. I am very pleased with this development and wish the entire team continued and deserved success.

Key figures

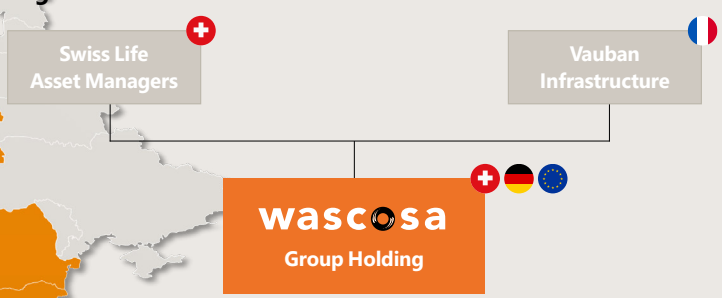
Total number of freight wagons
>17,000

Average age of the fleet:
13 years

Number of employees
>130

locations
Lucerne, Hamburg
and operating in over
23 European countries

Organisational structure



Success story in a new look

Wascosa is celebrating its 60th anniversary not only with a new brand identity but also with a comprehensive update as an investment in the company's long-term future. As an international market player and one of the leading rental companies in rail freight, Wascosa is redoubling its emphasis on customer focus and tailor-made solutions. At the same time, we've strengthened the emotional appeal of the Wascosa brand – as this is a key component of the new strategy, which is also reflected in the company's communications.

Employees from all 23 European countries have all been actively involved in the development process. They are the most important ambassadors for the Wascosa brand because they project our company culture beyond our organisation. The new brand identity conveys a rebellious spirit, which resonates with their needs whilst appealing to potential talent.

Video: Wascosa image trailer - We the rebels. Movers of change.

Check out the new Wascosa website. www.wascosa.com

Automatic tarpaulin solution increases efficiency in steel transport

In the highly competitive world of steel making, efficiency means everything. Every function within the business is regularly scrutinised in the quest to keep costs as low as possible whilst maintaining the highest possible safety standards. In this article we discover how, ArcelorMittal, one of the world's biggest steel makers along with leading European freight wagon systems provider, Wascosa, have, in partnership with the company Innovaction, itself a pioneer in automatic tarpaulin systems, been taking giant steps to improve the efficiency of rail-borne logistics.

Freight wagons are amongst the most important resourcRail wagons are a key logistics resource at ArcelorMittal which means that their performance during and after the loading process, is decisive in the drive to optimise efficiency. In fact, before the wagons even leave the plant, there is plenty of scope for improving efficiency.

Currently the process of loading the wagons with steel coils weighing up to 20 tonnes involves the time-consuming process of manually opening the tarpaulin sides of the wagons before carefully positioning the coils within the wagon.

As a campaigner for innovation, Wascosa saw the opportunity of replacing the manually operated tarpaulin sides with an automatic concept and the challenge to turn the theory into reality was on.

Successful tests

Thanks to its patented technology, Innovaction was able to demonstrate how such a system would work and in September 2023 a Shimmns test wagon, parked at ArcelorMittal's Florange plant, was fitted with an automated tarpaulin opening and closing mechanism. The results of the various tests were conclusive: Thanks to the powerful electric motorization system, opening and closing the tarpaulin was now faster, smoother, and safer. The automated system was also shown to offer more protection for the other components of the wagon such as the crossbars which are sometimes damaged when the tarpaulin is opened and closed either by hand or by using a clamp fitted to an overhead crane. What's more, special sensors were fitted to track the movement of the tarpaulin and ensure that it is locked before the loaded wagon leaves the site.

Generator provides power

The electricity needed to power the whole system is provided by an axle-mounted alternator. The solution works on the principle of electromagnetic induction. This involves generating electricity by converting mechanical energy into electrical energy which is then used to charge a set of non-lithium batteries. The batteries themselves are located in a metal compartment fixed to the wagon which can only be accessed by authorised staff. Alternatively, a Digital Automatic Coupling system can be used at the steel plant to provide power for the automated tarpaulin mechanism.

With the project moving into its final stages, a new generation of Shimmns wagons which are more efficient and safer for operators, looks set to take to the rails and in our next edition of the Infoletter we look forward to reporting back to you as the wagons are put through their paces in real-life conditions. ●

Do you have questions?

Please contact the Wascosa sales representative

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Video: The automatic tarpaulin solution

Calendar of events

DATE	EVENT	CITY	WEBSITE
2024			
10.12.2024	**RNE Genera Assembly**	Vienna and online	rne.eu/calendars
11.12.2024	**RFG Xmas Lunch**	London, UK	rfg.org.uk
2025			
13 - 14.01.2025	**New Year's Reception 15th VPI-Symposium**	Hamburg, DE	vpihamburg.de/de/veranstaltungen/uebersicht
28.01.2025	**RFG Member's Party**	London, UK	rfg.org.uk
29 - 30.01.2025	**17 BME/VDV-Forum Rail Freight Transport**	Berlin, Germany	bme.de/
05 - 07.02.2025	**Fruit Logistica**	Berlin, Germany	fruitlogistica.com/de/
13 - 14.02.2025	**27th Annual Conference of Railways Experts**	Berlin, Germany	
17.02.2025	**European Railway Award 2025**	Brussels, BE	europeanrailwayaward.eu/
27.02.2025	**Swiss Conference on Railway Safety 2025**	Basel, CH	bahnverstand.ch
04 - 05.03.2025	**Rail Tech Europe**	Utrecht, NL	events.railtech.com
01 - 04.04.2025	**Semaine Internationale du Transport et de la Logistique (SITL)**	Paris, FR	sitl.eu
14 May 2025	**VAP Forum on Freight Transport**	Zurich, CH	cargorail.ch
14 - 15.05.2025	**The Rise of IoT & Big Data in Rail**	Cologne, DE	iotandbigdatainrail.com
14 - 15.05.2025	**Railway Supplier Summit**	Vienna, AT	railwaysuppliersummit.com/
15.05.2024	**RFG Spring Group Meeting**	London, UK	rfg.org.uk
20 - 22.05.2025	**IAF International Exhibition**	Münster, DE	iaf-messe.com/en/
21 - 23.05.2025	**ITF Summit 2025**	Leipzig, DE	itf-oecd.org
26.05.2025	**Transport Research Arena (TRA)**	Madrid, ES	traconference.eu/
27.05.2025	**RNE Genera Assembly**	Warsaw and online	rne.eu/calendar/
28.05.2025	**Rail Transport Day 2025**	Warsaw, PL	
02 - 05.06.2025	**Transport Logistic 2025**	Munich, Germany	transportlogistic.de/en/
03 - 05.06.2025	**13th International Railway Summit**	Vienna, AT	irits.org/irs13/
17 - 19.06.2025	**Multimodal**	Birmingham, UK	multimodal.org.uk
18 - 20.06.2025	**Eurasia Rail**	Istanbul, TR	eurasiarail.eu/en/main
24 - 26.06.2025	**VDV Annual Convention 2025**	Cologne, DE	vdv.de
01 - 02.07.2025	**RNE Strategy Meeting**	Vienna and online	rne.eu/calendar/
08 - 11.07.2025	**UIC World Congress on High-Speed Rail**	Beijing, CN	uic.org/com/enews/article/uic-world-congress-on-high-speed-rail-8-11-july-2025
23 - 26.09.2025	**TRAKO**	Gdansk, PL	trakoexpo.com/en/
30.09 - 02.10.2025	**EXPO Ferroviaria**	Milan, IT	expoferroviaria.com

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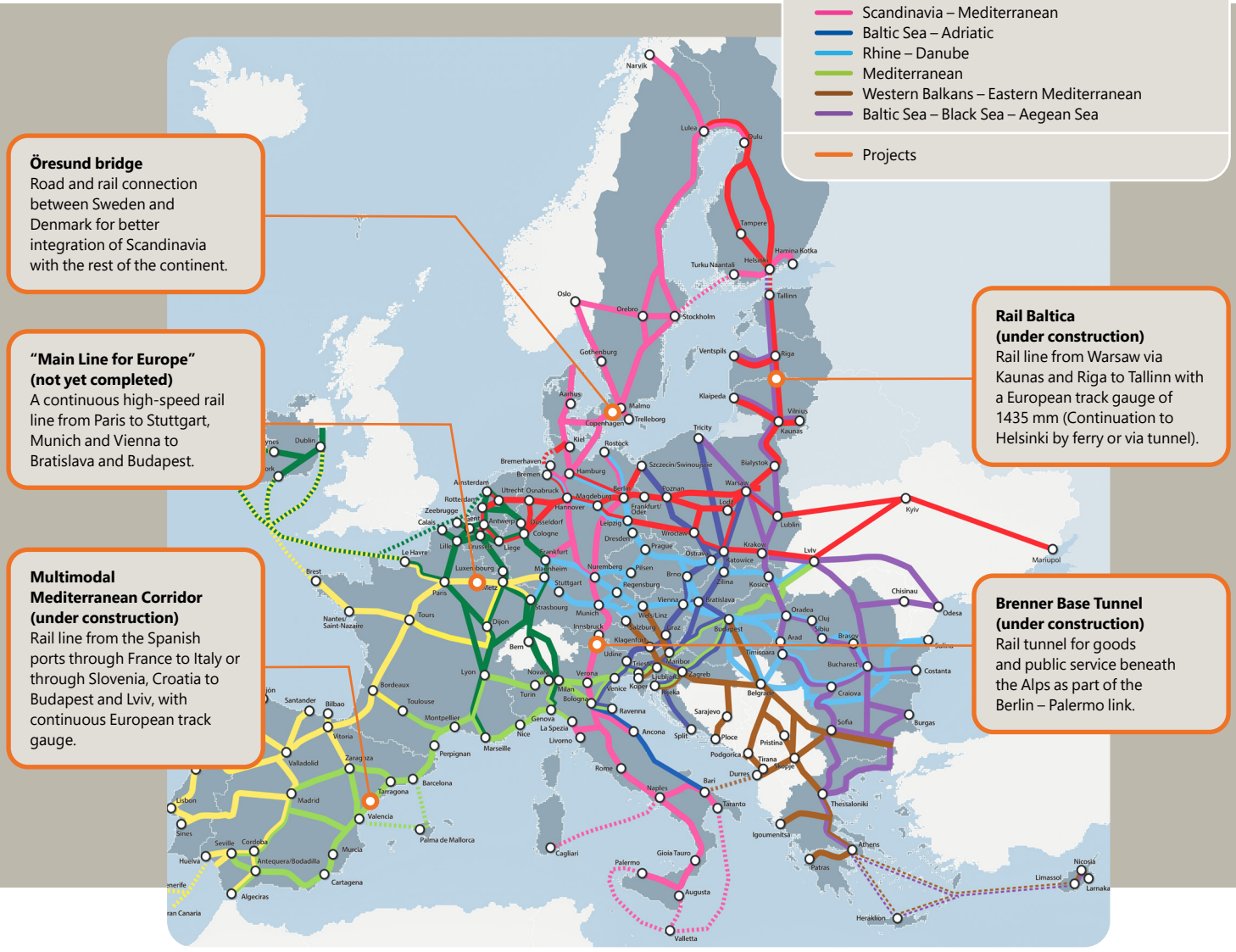
TEN-T: For sustainable connectivity in Europe

Cross-border networks and spaces are crucial for the future of Europe. The ecological transformation also significantly depends on the restructuring of infrastructure.

In the summer, the European Council adopted a revised regulation for the establishment of a Trans-European Transport Network (TEN-T). The objective of the new legislation is to create a reliable, seamless and high-quality Trans-European Transport Network that ensures sustainable connectivity across Europe without interruptions, bottlenecks or missing links. Moreover, the TEN-T creates an infrastructure base that supports the objective of a climate-neutral Europe.

The TEN-T network will be gradually built or updated with the new regulations. Its completion is planned in three phases: by 2030 for the core network, by 2040 for the expanded core network, and by 2050 for the comprehensive network. The most important instrument for the realisation of the core and extended core networks of the TEN-T is the European transport corridors. These corridors were developed by integrating the previous ERTMs and rail freight transport corridors ○



Source: Directorate-General for Mobility and Transport, European Commission and Infrastructure Atlas 2024 / EU