



**20**  
YEARS

**wascosa**

Edition 40 | November 2023

# infoletter

Latest news for the freight wagon industry





Dear readers,

*This issue of the Wascosa infoletter is special and, then again, not: On the one hand, I am very pleased to celebrate the 20th anniversary of the infoletter with this 40th issue which is in a special format. All three CEOs, Philipp Müller, Peter Balzer, and I have exchanged views on the infoletter's beginnings, its development over the past 20 years and its importance as an information platform for our industry in a roundtable discussion (pp. 2-5).*

*On the other hand, we have once again focused on the quality of the content and expert knowledge in this anniversary edition: For 20 years, the focus has been on the topics of customer orientation, innovation and digitalisation for both our company and our sector.*

*In order to move our industry forward, we have to keep breaking new ground. Read about the enjoyment and energy with which the Wascosa team contributes its enormous wealth of expertise and develops customer-oriented solutions together (p. 11f.).*

*After all, customer focus and innovation are part of Wascosa's DNA. Over the last 20 years, we have been able to successfully implement innovative ideas for our customers (p. 6f.) whilst also demonstrating our partnership approach (p. 13f.). Being part of these success stories with satisfied customers fills us with great pride and at the same time motivates us to continue working on new ideas and to help them achieve success on the market. Twenty-five experts who took part in our survey shared their views on future innovations with us (p. 9f.). Artificial intelligence (AI) is also a bearer of hope. That's why we are focussed on exploring all the possibilities offered by this new technology and are talking to solution providers such as Menlo79 or Konux (p. 15f.).*

*We will rely on long-term, cooperative relationships and carefully maintain our network. From this network, we always have access to expert contributors who provide exciting articles and external perspectives. I would also like to take this opportunity to thank all our experts who have contributed articles to the infoletter over the past 20 years. But above all, I would like to thank all of you who have remained loyal infoletter readers. Let me be the first to assure you: We remain committed to being an important information platform for you in the industry.*

Yours sincerely, Iris Hilb

# Yesterday, today, tomorrow: 1 Anniversary – 3 CEOs

It's already been 20 years since the first Wascosa infoletter was published. To celebrate this, we are taking a look back at the success story of our company while looking forward to the future of our industry. To do this we decided to sit down with the three Wascosa CEOs from the last 20 years.

## From the very beginning: A pioneer in brand management

The importance of strong brand management has long been underestimated in the industrial goods market. This is all the more true for the railway industry, which prior to its liberalisation was controlled by the monopolies of the former state-owned railway companies. Philipp Müller recognised this when he took over as Managing Director at Wascosa some 30 years ago and set about pursuing a long-term professional brand strategy.

**Mr Müller, how important is Wascosa branding for you and why in particular was the company colour "orange" chosen?**

**Philipp Müller:** The colour orange had already been selected in 1964 when the company was founded. In combination with black, it formed the colour scheme of the Wascosa logo from the very beginning, before changing in 1994 into the logo we have today. At that time, I recognised the lack of brand management in our industry as an opportunity for us as a small player in the market.

**"A brand or a corporate identity can only be wholesome and successful if it is linked to core values, lived and felt day in day out, and provides value to the customers. This was and is precisely the case at Wascosa."**

Peter Balzer

**What does it take to establish a brand with a clear, independent profile?**

**Philipp Müller:** Above all, it takes time and consistency. Because a brand must first provide credible, recognised and lasting proof of performance. Wascosa has succeeded in this: Over many years, we have produced demonstrable innovative achievements, combined with a strong focus on the actual needs of our customers. This was and continues to be the basis for successful branding! Wascosa is now recognised in the market as a pioneer and innovation leader that puts the needs of the customer first. In addition, we needed the right form of communication and to visually differentiate ourselves from the competition. As of 2003, our freight wagons were given an orange and blue livery, so you can see we were a trendsetter in this as well. Today, there are virtually no more grey or brown freight wagons in circulation.

**Mr Balzer, after you joined Wascosa as CEO in 2014, you quickly became a strong advocate of this brand strategy. Why?**

**Peter Balzer:** What I discovered at Wascosa was completely unique. There was a very clear corporate identity: From the freight wagons to the entrance area of the offices to the napkins, everything was in orange and blue. As Philipp has already explained, however, a brand or a corporate identity can only be wholesome and successful if it is linked to core values, lived and felt day in day out, and provides value to the customers. This was and is precisely the case at Wascosa: Our core values which were defined 30 years ago (demanding, progressive, agile, connected, rebellious, professional, responsive) are reflected in the way we consistently focus on our customers and on innovation. In terms of leadership, they have helped me every day to remind our employees of the essential behavioural values that define our value proposition and that distinguish and differentiate us in the market. Every Corporate Identity/Corporate Design, no matter how perfect will very quickly fade if the promised performance to the customers and partners is not delivered.



## The Wascosa infoletter: A source of information for the industry for 20 years

The Wascosa infoletter also plays a prominent role in Wascosa's brand communication. In this issue, we celebrate its 20th anniversary. This is no small feat in an age where information is fast-moving and widely available. And what has made the infoletter a non-stop success is its needs-oriented content mix of national, international, technical, commercial and political topics.

### Mr Müller, you are the father of the Wascosa infoletter. What was and is the infoletter's recipe for success?

**Philipp Müller:** The recipe for success was quite simple: there was nothing else at the time! Other than the VAP, the industry received no information from the associations, apart from once a year in the form of an annual report. Nothing came from the state railways either, with the exception of the UIC on purely technical topics. So that meant, there was a great need for up-to-date and useful information from the industry. We began in 2003 using the name "eurotank", for what was a German-language infoletter for the tank wagon sector. The current name was introduced in 2008, with the arrival of the eleventh issue and since then the Wascosa infoletter has also been published in English. Even at that time, it was sent in printed and electronic form to more than 2,000 business contacts in 15 European countries. Today, we have a print run of 4,500 copies, plus 5,000 electronic recipients in 37 countries around the globe.

### Mr Balzer, where have you set new trends with the infoletter?

**Peter Balzer:** The sheer amount of customer feedback that we have had over the years has confirmed to me time and again just how valuable the infoletter has become for our customers, partners and yes, even competitors. So, it wasn't really necessary to reinvent the newsletter. Nevertheless, it has always been a matter

of great importance to me to maintain the high level of quality. This is and remains the responsibility of the man at the top!

### Ms Hilb, you took over this responsibility at the beginning of 2023. Were you familiar with the infoletter as a reader before you joined Wascosa?

**Iris Hilb:** Yes, of course. During my time at DB Cargo, I very much appreciated the breadth of information provided by the Wascosa infoletter as an industry source. So, I'm very glad to take forward Philipp and Peter's legacy and am determined to maintain the very high quality of the infoletter. The last issue, which was also my first, was published in time for the transport logistic exhibition in Munich. Together with our trade fair partners, we were able to cover a wide range of innovative concepts and other topics which are important to our industry. I was very pleased with the many positive responses to the infoletter from the visitors to our stand at the fair. The extensive and in-depth responses to our survey on the innovation topics of the future (p. 9f.) also underscore the infoletter's relevance.

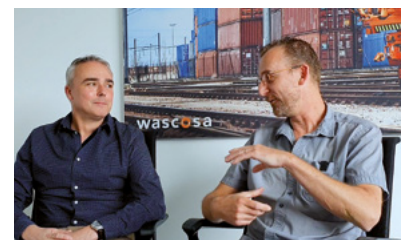
**"The recipe for success of the Wascosa infoletter was quite simple: there was nothing else at the time! There was a great need for up-to-date and useful information from the industry. Today, we have a print run of 4,500 copies, plus 5,000 electronic recipients in 37 countries around the globe."**

Philipp Müller



Innovation as a model for success

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Convincing expertise that works

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Future AI solutions on the radar

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**Philipp Müller:****Strong brand strategies for independent, innovative players**

Philipp Müller studied economics at the University of Basel from 1981 to 1987 (lic. rer. pol.). He began his professional career at IBM Switzerland as Marketing Representative from 1988 to 1992 and at ISL Worldwide as Manager for Football from 1992 to 1993. From 1993 to 2014, he was CEO and Delegate of the Board of Directors of Wascosa AG, and from 2014 to 2022 Chairman of the Board of Directors of Wascosa AG. Today, he is Chairman of the Board of Directors of Wascosa Group Holding S.à.r.l.

**Peter Balzer:****A progressive force for growth on board a determined team**

Peter Balzer was CEO of Wascosa AG from 2014 to 2022. He has decades of experience in management, logistics and project management from his previous positions. Before joining the company, Peter Balzer served for over ten years as an external consultant advising Wascosa on various topics. Today, he is Chairman of the Board of Directors of Wascosa Group Holding AG.

**Growth: From small company to market leader**

Wascosa is clearly a story of growth. The journey from a small Swiss company to the fourth largest private leasing company in the freight transport market in Europe has seen groundbreaking innovations, but also various challenges.

**Mr Müller, can you summarise Wascosa's growth for us in figures?**

**Philipp Müller:** When I first started out as CEO, Wascosa only had 5 employees managing 1,000 freight wagons, leased in just 5 countries. When Peter took over as CEO in 2014, we already had a team of 39 employees, with 5,500 freight wagons under management and with sales operations spanning 12 countries across Western Europe. Peter and I then developed an ambitious growth strategy to increase the number of freight wag-

ons that Wascosa managed to 10,000. By 2018, we had achieved the objective, a year ahead of schedule. Today, Wascosa employs more than 100 people, manages 16,000 freight wagons and operates in 23 countries.

**From your perspective, what were the foundations for this rapid growth?**

**Peter Balzer:** We have already discussed our value proposition and the related factors of innovation and customer orientation. However, the rapid growth was also only possible thanks to the extremely close and positive way in which Philipp and I worked together and the great trust that we had in each other. We were bold in the way we tackled problems, challenges or necessary changes to our staff; but we always acted with a high degree of social responsibility and always in the best interest of the company. With so much growth and market power, it is not surprising that the back office took a back seat for a while. In recent years, we have therefore invested a lot in our back-office systems to make them more scalable, modern and future-proof.

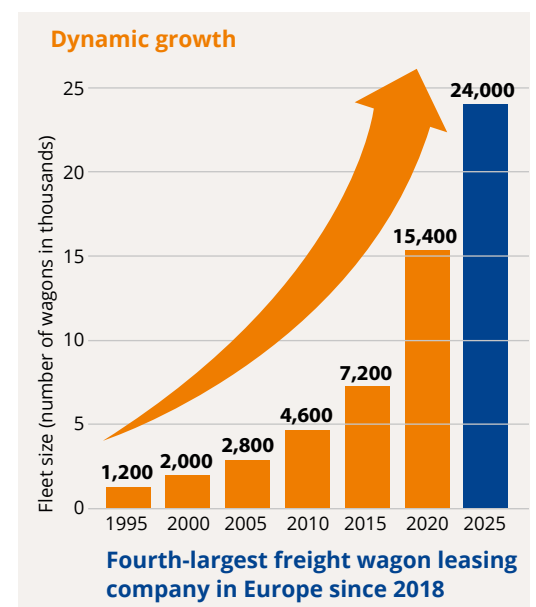
**Mr Balzer, if you browse through the infoletter, you can see how, step by step, Wascosa developed its operations in Europe. Looking back, what was the biggest challenge and what was the best moment?**

**Peter Balzer:** Over the last nine years, we've added Spain, Portugal, the entire Benelux region, the UK, Scandinavia and Central and Eastern Europe to the markets which we cover. Each new country had its special features, opportuni-

ties and risks. The geographical expansion was a major challenge and had to be approached with great care. Our principles and keys to success have always been the same: First find the best-suited local person before actively taking on a new market. The biggest challenge, however, was integrating the former Nacco branch office in Hamburg into Wascosa. There were strong cultures on both sides which meant that the merger wasn't entirely painless. But looking back, we were quite successful in overcoming these challenges and we are proud to have such a strong branch office in Hamburg.

**"Wascosa has been investing in digital technologies for a very long time, especially in telematics and sensor technology. We want to generate even more value from these investments, both for our customers and for our own business processes, and at the same time tap into additional, emerging technologies."**

Iris Hilb





#### **Iris Hilb:**

#### **Innovative, digital and networked with customers and partners for the future**

Iris Hilb was appointed as the new, acting CEO of the Wascosa Group as of 1 January 2023. Iris Hilb holds a degree in business administration and worked for more than 25 years in various functions in the areas of sales, strategy, marketing customer service, IT, wagon management and service purchasing at DB Cargo AG before joining Wascosa.

## **The future: Innovation and digitalisation**

The future of rail freight logistics lies in the continuous linking of innovations with digitalisation. It's for this reason that, Wascosa has focused on customer-oriented products and solutions that improve the efficiency and safety of rail freight transport step by step.

*The optimised control of logistics systems is an important topic for your customers. Where are the major future opportunities from the lessor's point of view?*

**Iris Hilb:** The freight wagon acts as the interface to our customers and is an integral part of logistics. So, this provides us with numerous opportunities to contribute to optimisation through new concepts. The most promising approaches from my point of view are increases in efficiency by means of a higher payload, innovative logistical concepts for our customers, for example at the interface between rail and road, as well as new digital solutions to improve the way transport is controlled.

*Ms Hilb mentioned the optimisation of the interface between road and rail. The shift to rail has always been a major political topic, even in the Wascosa infoletter. What role do politicians need to play?*

**Peter Balzer:** Politicians need to create the necessary framework conditions so that all those involved in rail freight transport, from railway undertakings (RUs), operators, wagon leasing companies, infrastructure managers, terminals and many more, have a motivating environment in which to operate successfully. This is a signifi-

cant challenge. I know that there are many constraints in politics that make it difficult to find solutions in individual countries. But the positive mood of all involved makes me confident. Rail freight transport is a valuable and indispensable sector with a lot of potential for the future. That is why, in the infoletter, we are constantly signalling the changes needed in rail freight transport and presenting the facts so that they are better understood by decision-makers in business and politics. In addition, we try to support in every way we can, the associations who are fighting for better framework conditions in rail freight transport. Ultimately, however, we have to accept reality as it is and make the best of it. A current, innovative example with a lot of promise, especially at the interface between road and rail, is the Wascosa flex freight system® because modular wagon concepts can sustainably improve the efficiency of rail freight transport.

*Ms Hilb, let's conclude by taking a closer look at digitalisation, which you mentioned as one of three central mechanisms. How is Wascosa involved here and what are its goals for the future?*

**Iris Hilb:** Wascosa has been investing in digital technologies for a very long time, especially in telematics and sensor technology. We want to generate even more value from these investments, both for our customers and for our own business processes, and at the same time tap into additional, emerging technologies. To this end, we are focussing on three main objectives: more consistent automation of processes in rail

logistics, more comprehensive use of the data in order to better manage the logistics processes, and on a stronger focus on data analysis and evaluation so that, for example, we can optimise the maintenance of freight wagons in a targeted manner.

*Compared to other industries, your sector is not necessarily considered to be particularly dynamic. Even digitalisation has not yet achieved a major breakthrough. But if you look at the last issues of the Wascosa infoletter, it is clear that you and your partners and suppliers are in an optimistic mood.*

**Iris Hilb:** Digitalisation in the rail freight transport market has indeed gained momentum in recent years. From my perspective, however, there is still a lot of untapped potential. As an example, I would like to mention the collaboration between wagon keepers, railways and workshops in Europe. Manual processes still dominate here in many cases. Meanwhile, there are plenty of data sources for optimising all aspects of freight wagons. In addition to telematics and sensor technology, plenty of data are available, e.g. camera images from operations. A more consistent and shared use of this data can bring advantages for owners, railways, and customers. Pooling data and providing easy access for each other would bring us all a step closer. This is a challenge for us collectively as an industry.

# Innovative strength thanks to start-up spirit

Innovations require good ideas and expertise. After all, innovations must offer customers concrete added value. However, a product can only be called a true innovation if it is successful on the market, otherwise it remains just a good idea. The agile spirit of a start-up and a large network of customers and partners form the basis for Wascosa's success in innovation.

*Irmhild Saabel, Chief Business Development Officer CBDO and Chief Sales Officer CSO, Wascosa*

Wascosa does not have a large in-house research and development department. Instead, we look for the best experts in the market as partners for our innovation projects so that we can break new ground together. Depending on the issues, these can be freight wagon builders, manufacturers of individual components or even expertise providers from outside the industry, such as from the automotive sector. Whenever possible, a launch customer is also closely involved in the development process. We only develop independent innovations if they concern maintenance management. Here, we look for technical solutions to achieve long-term cost savings or to increase the safety of our wagon fleet. But then, of course, the customer is always closely involved.

## At the beginning there is always a customer concern

At the beginning of every project, we clarify the added value that the new or enhanced product should bring to the customer. Is it a question of how to save costs through better utilisation? Do they want increased safety for their staff or their goods that they are transporting by rail? Or which technical innovation could optimise the loading or unloading times? The clearer the objectives, the greater the chances of a successful project. This was also the case for the development of the new Tanpps bulk freight wagon with our long-standing customer K+S: The company is involved in salt and potash mining and transports around 6 million tonnes of salt and fertiliser products by rail every year. The goods must be 100% protected from moisture during transport. The requirements for the wagons were therefore clear: they had to have maximum resistance to corrosion. Furthermore, they had to be easy to operate, as flexible as possible and offer an optimal maximum load and minimum wagon length ratio.

**“The innovative concept of the swivelling and easy to operate unloading chutes has proved to be particularly effective. This allows the wagons to be unloaded flexibly and ergonomically under the very different technical parameters of our customers on site.”**

Christian Koop, Project Manager K+S



*Our Tanpps wagon offers short unloading times and high flexibility thanks to, among other things, unloading chutes that can be rotated in three directions.*

## New solutions thanks to strong partners

These requirements called for new solutions. We therefore invited the wagon builder Niesky to join our project team as general contractor. They not only equipped the Tanpps with corrosion-resistant rubber roller springs, rustproof operating elements and an interior coating suitable for foodstuffs but were also able to reduce the weight of the wagons using roofs made from aluminium. Thanks to the rounding of the funnel corners and the unloading chutes that can be rotated in three directions, we were also able to significantly reduce unloading times.

As part of a further development of the Tagnpps for Glencore Agriculture (now Viterra) the tare weight of the wagons also had to be reduced in order to increase the payload for products with a high bulk density, such as maize or wheat, and

**“Communication at all levels is very transparent and efficient. In addition, Wascosa has an excellent understanding of our needs and knows how to meet them.”**

Hajo Barth, Operations Manager Grains, Viterra (previously Glencore Agriculture)

to increase user-friendliness. The result was the Tagnpps 95 m<sup>3</sup> with a tare weight of just 19.7 and a max. payload of 70.3 t. At the same time, large openings allow faster and more efficient loading and unloading and handling is made easier by a wagon roof that opens completely.



Glencore Agriculture (now Viterra) and Wascosa have been partners in the development of new, increasingly efficient grain wagons since 2012.

### 3 innovations, 3 different approaches

Our approach is as varied as the needs of our customers especially when it comes to wagon safety, Wascosa has shown itself to be a trendsetter time and again in recent years: In 2010, we developed the Wascosa safe tank car® for Grillo Werke AG in Duisburg, which was based on a completely new safety standard and went far beyond the legal safety requirements of the day regarding the transport of hazardous goods. This required creativity and the courage to move away from existing standards and consistently break new ground – without fear of setbacks. Here, too, it was crucial that Grillo was actively

involved. As far as possible, discussions usually take place directly with the customer at the design meetings. If necessary, several times, until a convincing solution is found which meets all requirements.

### Excellent safety thanks to creativity

In order to revolutionise the protection concept for the transport of hazardous goods, we made a point of involving automotive development experts in the Wascosa safe tank car®. During numerous accident simulations, this project team tested the effectiveness of the tank wagon developed by us and our partner using derailment

**“I am proud that we were able to successfully complete this sophisticated project with our major partner Wascosa, in the space of two years and that we have exceeded the legal requirements in the process. Now we have a tank wagon, that is designed and built according to the highest safety standards and fully approved for transporting acrylonitrile. This tank wagon is the new standard bearer.”**

Pieter Boon, CEO AnQore



In cooperation with AnQore, Wascosa has developed an innovative dangerous goods tank wagon (AN) for the transport of acrylonitrile.

detectors, cash buffers, anti-climb and rollover protection. We were also able to persuade the technicians to install two cross-over platforms on the wagon instead of just one. Many of our innovations were also recognised by independent experts: The European Chemical Industry Council (CEFIC) adopted parts of the Wascosa safe tank car® design in its recommendations as early as 2013. In 2015, the Wascosa safe tank car® was awarded first prize in the Responsible Care competition of the North Rhine-Westphalia regional association. A little later, the concept of two cross-over platforms also became established as a new safety standard in the industry and has been one of the umbrella organisation CEFIC's recommendations since 2016.

As the development of its tank car 3000® progressed, Wascosa became the first wagon keeper to not have ladders on the tanks. And in 2020, together with the German company EST Eisenbahn-Systemtechnik GmbH, we improved the Wascosa safe tank car® for the Dutch company AnQore by including a special head shield, the Protection Shield PS02, which offers the tank additional protection in the event of a collision with a neighbouring wagon.



With the slogan «Flexibility has a name», Wascosa presented the container flat wagon developed for BASF at the transport logistic 2017 in Munich.

### Innovation on track with our objectives

As with BASF, an entirely different approach was necessary when we took part in an innovation competition. In such a situation, the criteria of the tender have to be fulfilled as precisely as possible, which means that there is somewhat less scope for our own creativity. The direct discussions with customers that Wascosa usually prefers in design meetings are also not possible for

**“Our new logistics solution brings more flexibility and makes rail transport more competitive and innovative for companies. Working with Wascosa and the other partners (involved in the project) is a lot of fun.”**

Holger Schmiers, Project Manager BASF  
Miriam Walter, Manager Rail & Site Services BASF

reasons relating to competition law. Nevertheless, even in this case we are able to rethink the existing systems, standards or processes in order to give the customer competitive advantages in terms of cost structure, efficiency or safety. In 2017, Wascosa developed a container flat wagon for BASF in cooperation with Tatravagonka that can transport the highly flexible BASF tank containers B-TC with their weight of 73.5 t in single wagon traffic. The container flat wagon was simultaneously adapted to our modular freight wagon system Wascosa flex freight system®. By separating the body and the container flat wagon and other flexible and customised solutions, BASF realigned and optimised its plant logistics from the ground up. Not only did loading and unloading become easier, but BASF was also able to significantly reduce lead times at the plant. To achieve this, it used Automatic Guided Vehicles for deliveries on the first and last mile. To this

day, the logistics concept in Ludwigshafen is considered a model example throughout Europe in terms of efficiency.

### Expertise thanks to networking

Customers from a wide range of industries are increasingly interested in how they can optimise their processes, e.g. by using the Wascosa flex freight system®, thereby becoming more efficient and competitive compared to their competitors. This is demonstrated by the fact that the Wascosa flex freight system® wagons are already in use. This process orientation repre-

### The right spirit for the future

Looking to the future, I still see great development potential in telematics and intermodal transport. Our broad (industry) know-how, deep understanding of our customers' needs and close cooperation with innovative top experts – both from within and outside the industry – is and should remain Wascosa's secret to success when it comes to exemplifying flexibility and customer orientation with innovations. We have proven that even a small team can achieve great things. This spirit should continue to be what makes Wascosa unique in the future. To this end,



Objective achieved: The Fanps automated ballast wagon makes the work of track renewal teams much safer.

sents the third approach to innovation. A recently launched example of this category of innovation is the Fanps automated ballast wagon for track construction, developed in collaboration with Ateliers de Joigny and Transalp Renouvellement. Following their high-profile unveiling at the transport logistic trade fair in Munich in May 2023, these wagons are now being used or tested for the first time by various customers.

we are constantly bringing on board young, new people who have broad specialist knowledge. We are also constantly cultivating and expanding our network of strong partners and customers who want to help us take innovation to the next level.



# Formative innovations, forward looking vision

To mark the 20th anniversary of its infoletter, Wascosa asked leading experts from all over Europe which innovations they think will have the most influence on the freight wagon industry in the coming years. The advances in digitalisation and telematics have generated a high degree of expectation so we also wanted to know more about the vision driving all these innovations.

The freight wagon industry, they say, is sluggish, not very dynamic and is very slow at making progress. These are accusations that the industry has had to face time and again. But how do the

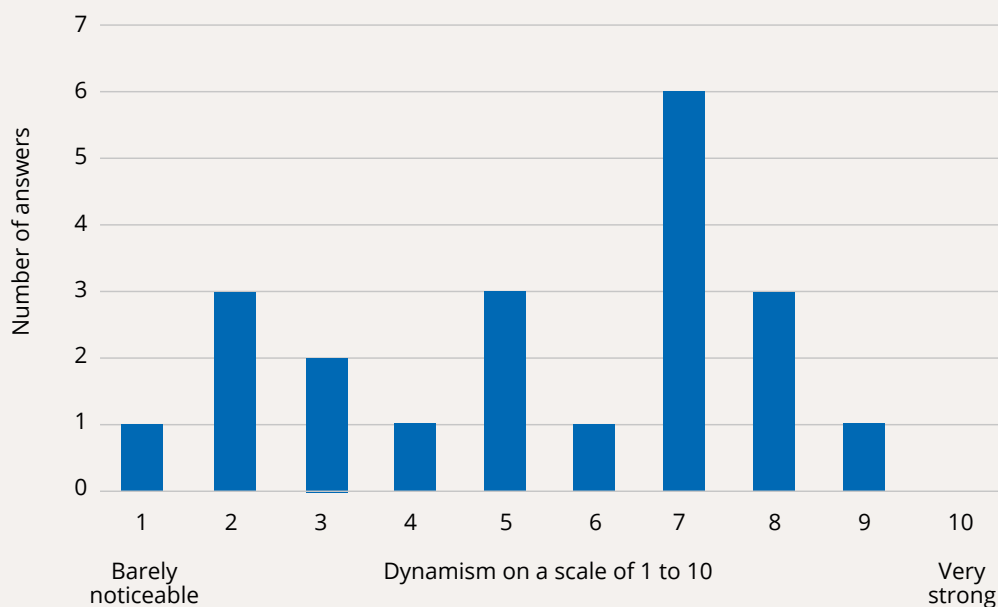
experts themselves assess the dynamics in their industry? This and a number of other questions were answered by a total of 25 experts from all over Europe who took part in the survey.

## Major changes in ten years at the latest

In light of these results, it is unsurprising that the experts are optimistic that the potential of digitalisation and telematics will soon be exploited. The majority of participants (14 out of 25) expect major changes to business models to happen through digitalisation in rail freight transport already in the next five years. With a single exception, all experts agree that major changes will occur in ten years at the latest (see chart p. 10).

When expressed in words, the survey participants are convinced that telematics will make a major contribution to optimising rail freight transport. Digitalisation is expected to improve how customer needs are fulfilled as well as achieve greater efficiency and transparency in freight transport. When the topic of efficiency is explicitly addressed, the experts mention the avoidance of empty runs, the extension of maintenance intervals and the expected capacity to plan these intervals, for example.

### How do you think the dynamics have developed in recent years regarding innovation in rail freight transport?



### In which areas do you think innovations will contribute to optimising rail freight transport in the next 20 years?

(The list of topics provided was prioritised by the experts)

1. Digitalisation
2. Telematics
3. Flexibility / Alignment with individual customer needs
4. Transport safety
5. Environmental friendliness
6. Cost efficiency
7. Process efficiency
8. (Operational) security
9. Noise reduction

Nine participants clearly refute the accusations and assess the dynamics in the industry as quite strong with seven or more points on a scale of one to ten. However, the experts rate the progress in recent years as moderate with an average of 5.24 points based on all the responses.

Most experts associate Wascosa with the flex freight system®, innovations in the field of telematics and sensor technology, as well as safety innovations, especially in connection with the Wascosa safe tank car®.

### Digitalisation and telematics as drivers

Digitalisation and telematics will give rail freight transport a significant boost in the coming 20 years. All the experts agree. Survey participants also see great potential for optimising rail freight transport with innovations in flexibility and aligning freight transport with individual customer needs as well as in transport safety. They find moderate potential for optimisation in environmental friendliness as well as cost and process efficiency. They see the least potential for a boost through innovation in the continued improvement of operational security or further noise reduction.

**“The combination of telematics and digitalisation will bring massive and disruptive change to how rail equipment is utilised and how the rail network will be able to cope with much higher volume in an efficient way. Despite more complexity, safety needs to remain priority number one.”**

Michel Bisshops, SABIC

### High expectations on artificial intelligence

There are also high expectations on the possibilities of artificial intelligence (AI) in freight transport. The majority of participants in the survey (14 out of 25) rate these possibilities at seven or higher on a scale of one to ten. At 6.6 points, the average of all responses also indicates high expectations. (see chart p. 10).

**“My vision consists of a completely renewed European infrastructure, all the old wagons replaced with new ones, and more automation which would lead to less risk of accidents caused by human error.”**

Sandra Vukic, Ferest Rail SpA

**Self-driving wagons and top infrastructure in the future**

When asked about their vision for innovation in rail freight transport that neither exists currently nor is foreseeable in the near future, some of the survey participants dream of intelligent, self-coupling wagons and autonomous trains. Some even dream of automatic underground connections between manufacturers and the sites used for delivering goods, or at least dedicated rail freight transport infrastructure that no longer runs through residential areas.

Others want a completely renewed, modern infrastructure in Europe as quickly as possible, or a Europe with English as a common transport language for driving personnel, uniform infrastructure safety systems, uniform costs for the use of the infrastructure, and uniform electricity supply standards. As an apt picture for this future, an expert recalls the cover image of issue no. 38 of the Wascosa infoletter published last year: “All the trains are moving and not held up by red lights.”

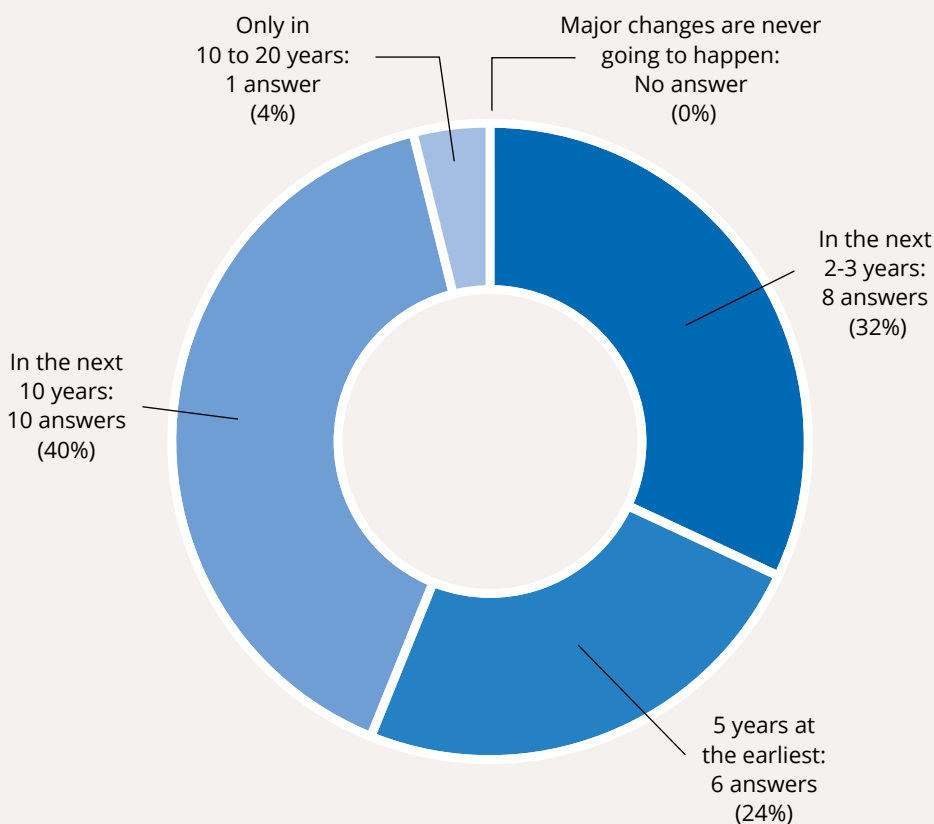
All agree, however, that safety must always be the top priority in all these innovations. Or as Paul Goris of the International Dry Bulk Terminals Group puts it: “Safety always comes first. It’s all about people.”

**“Digitalisation will be a leader to more efficiency. However, safety always comes first. It’s all about people.”**

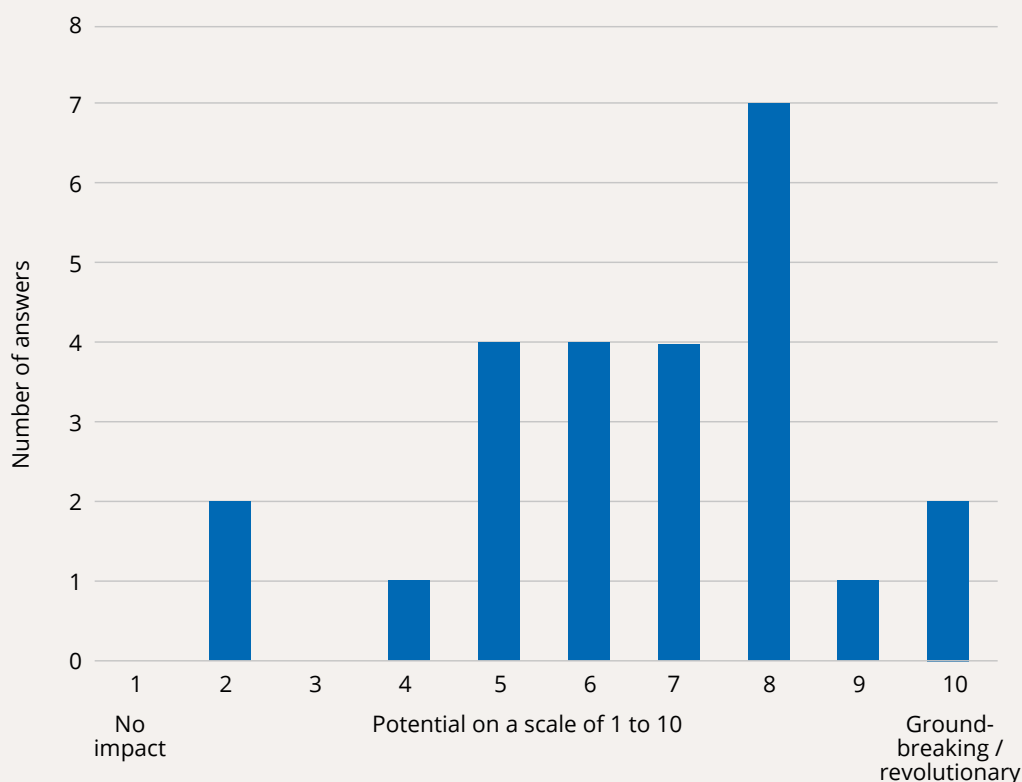
Paul Goris, International Dry Bulk Terminals Group

**Find out about the first practical solutions that use artificial intelligence in rail freight transport in the article on page 15.**

**Rail freight transport still has some catching up to do in terms of digitalisation. Within what timeframe are major changes to occur in business models as a result of digitalisation?**



**What do you think artificial intelligence (AI) can offer in the future development of rail freight transport?**



**About the survey:**

A total of 25 experts from a wide range of European countries responded to Wascosa’s survey. A big thank you from Wascosa to everyone who took part! Three participants will each be receiving a model wagon from Wascosa as a special thank you.

# 20 years of expertise - We are Wascosa

Wascosa boasts an internationally and professionally broad-based team. At the forefront of its field, this is a company which is agile, progressive and innovative, and which consistently goes its own way to always provide the best possible solutions for its customers. What we hear from our team confirms this: Working at Wascosa is multifaceted, challenging, offers tremendous development opportunities and most importantly: it's fun!

Wascosa has grown substantially over the last 20 years. Philipp Portmann, who has been responsible for finances at Wascosa for 23 years, has experienced this change first hand: The company that started out with just 8 people at the time, now employs over 100 people at its locations in Lucerne and Hamburg. Since he started at Wascosa, a number of new departments have been created and Philipp Portman found himself constantly dealing with new topics – financial, accounting, but also technical and legal. This dynamic environment along with the huge variety of projects also offered Torben Kempf varied and exciting development opportunities: Having started as a technician at Wascosa more than 17 years ago, he switched to sales in 2014, was later head of fleet and claims management and has been responsible for safety management since 2017.

**“We are always moving steadily forward.”**

Torben Kempf, Safety Management, employee at Wascosa for 17 years



More than 20 years at Wascosa: Philipp Portmann and Torben Kempf.

## Agility thanks to plenty of variety, new ideas and a sense of humour

The younger generation also greatly appreciates the endless variety and vitality: “Every day offers something new. There is never a boring day” – and “you are always learning”, confirm 22-year-old Alessandro Carbone, technical customer support manager, and 17-year-old IT apprentice Ali El Toufeili, who is part of the digitalisation team at Wascosa. He particularly appreciates, “that all age groups are represented”. This means that it

is always possible to find someone of the same age, with a similar background, interests or region of origin. Everyone benefits from this: While older employees pass on their broad expertise and experience to the younger generation, the younger team members bring their fresh new ideas to the team, and, in the words of Alessandro Carbone, add “a dose of humour and energy”.

## Knowledgeable, progressive and independent for success

Patrizia Fischer-Ferraro and Jürg Fischer met one another while working at Wascosa. They have both been working in the railway industry for 20 years, 14 of them at Wascosa. Since then, they have been real team players at home and at work. They also believe that everyone in the Wascosa team can count on one another for support.



Age 20 at Wascosa: Ali El Toufeili and Alessandro Carbone.

This reliability also means a lot to Philipp Portmann. For him, however, the unique concentration of specialists in the team makes all the difference. This expertise, he is convinced, is what drives Wascosa forward and gives the company an edge over the competition. Torben Kempf agrees: "We are constantly moving forward, are open-minded to new things, and forge our own path by doing many things differently from the competition." This is how objectives are attained, "that would otherwise be difficult to achieve", adds Ali El Toufeili with pride. And Torben Kempf is also convinced that: "Wascosa will continue to trend upwards (in the next 20 years)".



20 years' experience in the freight wagons business: Jörg Fischer and Patrizia Fischer-Ferraro.

**"I like the variety. There is never a boring day."**

Alessandro Carbone, age 22; responsible for Technical Customer Care at Wascosa

**Forward-thinking, responsive and demanding**

For Jörg Fischer, the key to Wascosa's success also lies in being close to the customer and thinking big. "We were always dismissed as the 'little Swiss company'. Today, Wascosa is a major international player." Even before his time at Wascosa, Jörg Fischer greatly appreciated the company's ability to always respond quickly, and today, still, Wascosa excels in providing customers and workshops with prompt answers to their problems. The high demands that are placed on the team, as well as on the individual, are confirmed

by Torben Kempf, who recalls how nervous he was when he had to give a presentation on electronic data exchange between the workshop and

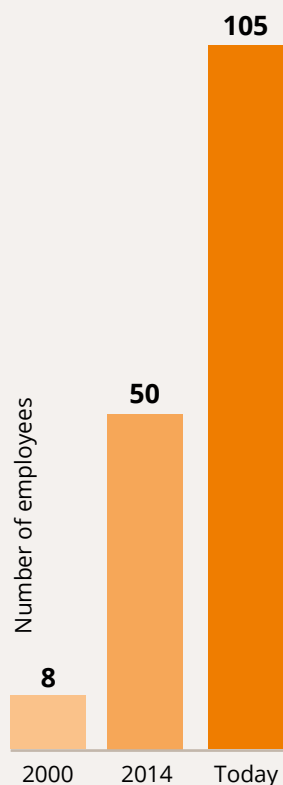
the wagon keeper in front of the "whole team" at Transport Logistic 2019. Nevertheless: Wascosa gives its employees a lot in return, in addition to a great deal of responsibility: Philipp Portmann and Torben Kempf, for example, still fondly remember the training seminar in Emmetten (Canton Nidwalden, Switzerland), when the whole team was picked up after dinner by three helicopters for a flight around the Swiss Alps.

**"Wascosa is Wascosa. Everyone is pulling in the same direction."**

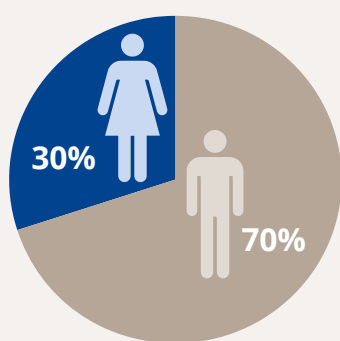
Jörg Fischer, Quality assurance/maintenance at Wascosa

**We are Wascosa – a mixed, international team with broad expertise**

**Our team is growing**



**Our team is mixed**



**Our team has freight car expertise**

204 hours of internal education and training of the employees per year



**Our team is international**

We represent 20 nationalities and speak 17 languages:

- Albanian:** Vagonët e mallrave
- Arabic:** Aarabat shahn عربات شاهن
- Bosnian:** Teretni vagoni
- Chinese/Mandarin:** Huòchē 货车
- Croatian:** Teretni vagoni
- Danish:** Godsvogn
- English:** Freight wagon
- French:** Wagon de marchandises
- German:** Güterwagen
- Italian:** Vagone merci
- Portuguese:** Vagões de carga
- Russian:** Gruzovyye vagony Грузовые вагоны
- Serbian:** Teretni vagoni Теретни вагони
- Slovak:** Nákladné vozne
- Spanish:** Vagones de mercancías
- Turkish:** Yük vagonları

# Constantly striving for the optimum

Shorter, lighter, safer, more flexible and more efficient – until we achieve the optimal wagon! This summarises Wascosa's development work which has been documented in the infoletter over the past 20 years. Revisiting the five examples below underscores Wascosa's uncompromising customer orientation – in service as well as in the construction of new wagons.

In 2013, Uwe Klöpfer, Head of Purchasing and Sales Trade and Industry at Westfalen AG gave Wascosa top marks for its service as we reported at the time in the infoletter: "In awarding the mandate for the fleet management of our wagons, the criteria included Wascosa's decades of experience and high level of expertise in the leasing and management of freight wagons, factors which are reflected in a comprehensive and high-performance service package." Not long after, and in recognition of its consistently positive experience Westfalen AG also awarded Wascosa the contract for the new construction of Zags-type pressurised gas tank wagons. The wagons have centre longitudinal girders (instead of external longitudinal girders) which means they are easier to operate.

### T3000e pocket wagons for maximum flexibility

Four years later, in 2017, LKW WALTER ordered one hundred T3000e pocket wagons from Wascosa to further strengthen and expand its already strong position as a combined traffic operator: "After a comprehensive analysis and the ultimate decision to implement our plans, the choice of Wascosa as the ideal partner for our leasing business was a relatively quick one", recalls Karl Schauer, then Deputy Managing Director of LKW Walter. "Using the hundred leased T3000e pocket wagons, we were able to compensate for bottlenecks with our rail partners and stabilise capacity for our customers. As a result, we arrived at a commercially optimal set-up." In total, LKW Walter has more than doubled the number of its combined transport shipments in the last 10 years, linking all of Europe's major economic centres with more than 300 daily departures and over 250 short-sea and rail routes.

### Suitable bogies for optimum payload on bulk freight wagons

In the same year, thyssenkrupp Steel Europe issued invitations to tender for the leasing of 160 open Falns bulk freight wagons for lime transport. The company deliberately opted for a new development that would build upon all the experience gained from previous transport operations as well as the specific conditions at the loading and unloading points. Here, too, the experts from Wascosa were able to assist: They optimised the payload and made the wagons more flexible and user-friendly thanks to a bogie designed for thyssenkrupp. "By switching to the new payload-optimised bulk freight wagons, we are (now) able to carry out our transport operations more efficiently and flexibly – and at much lower cost. Plus, thanks to the optimisations, we have also been able to reduce the number of wagons required by more than 10%, while maintaining the same transport volumes", explains Achim Figge, Head of Resource Management at thyssenkrupp Steel Europe, with great satisfaction. And there was even more to be satisfied about in the supplier evaluation which came almost 3 years later: In 2020, Wascosa received a positive service provider rating to become a "Preferred Supplier" (A-supplier) of thyssenkrupp Steel Europe.

**"Thanks to the optimisations, we have been able to reduce the number of wagons required by more than 10%."**

Achim Figge, Head of Resource Management at thyssenkrupp Steel Europe



Positive experience: Westfalen AG ordered Zags type pressurised gas tank wagons from Wascosa.



With the double pocket wagons from Wascosa, LKW Walter was able to compensate for bottlenecks and stabilise capacities.



Wascosa provided 160 optimised Falns bulk freight wagons for thyssenkrupp Steel Europe.



The Wascosa fleet includes Eamnos and Eanos bulk freight wagons.

Further innovative projects for customers are presented in the article on page 6ff.

#### 42 modern Eamnos bulk freight wagons to connect to the future

Wascosa also made the most of the development of the Eamnos bulk freight wagons for BELog: Notwithstanding their higher maximum payload of 71.1 t instead of 65.5 t, they are around 4 metres shorter than the company's previous wagons. This means they offer a very high degree of flexibility, especially when transporting heavy bulk commodities. "Since then, we have also been able to access shorter track systems in an economically viable way without having

to shunt too often", explains Timo Pape, Managing Director of BELog GmgH & Co. KG. At the same time, transports have become more efficient and sustainable, as BELog can form heavier trains and thus reduce energy consumption per tonne-kilometre. BELog is also well-equipped for the increasing digitalisation in freight transport thanks to the new wagons: "The Eamnos wagons provide everything we need so that we can incorporate a modern telematics system in future", confirms Matthias Zilke, Log and Wagon Management at BELog building materials.



The rollout of 300 grain wagons from Wascosa to FerestRail was celebrated in Italy (see photo and video). Wascosa's Tagnpps bulk freight wagons are available with loading volumes of 130 m<sup>3</sup>, 102 m<sup>3</sup> and 95 m<sup>3</sup>.

#### 300 95m<sup>3</sup>-Tagnpps wagons for Co<sub>2</sub>-free2-free grain transport

Based on the 130 m<sup>3</sup> Tagnpps developed for Glencore Agriculture (now Viterra), Wascosa has further optimised the payload of the Tagnpps 95 m<sup>3</sup>, resulting in the grain wagon with the highest payload on the market today. 300 wagons of this type were delivered to FerestRail in 2023 and their roll-out was celebrated jointly with Wascosa in Udine (Italy) in May (see photo and video). "Wascosa has optimised the 300 bulk freight wagons exactly according to our needs. We can now put together shorter trains and thus serve even more of our customers with 2,500 tonne gross trains", explains Sandra Vukic, CEO Ferest Rail, with pride. With the wagons leased from Wascosa, FerestRail has increased its transport capacity by 40% – a clear commitment to CO<sub>2</sub>-free freight transport on rails.

# Artificial intelligence is going from strength to strength

It's been confirmed by railway experts from all over Europe who completed our survey (see page 9): Artificial intelligence (AI) is also a great source of hope for rail freight transport. As a result, Wascosa is actively exploring the possibilities of this new technology and is in close contact with solutions providers such as Menlo79 und Konux, who are already successfully using AI solutions in rail freight transport.

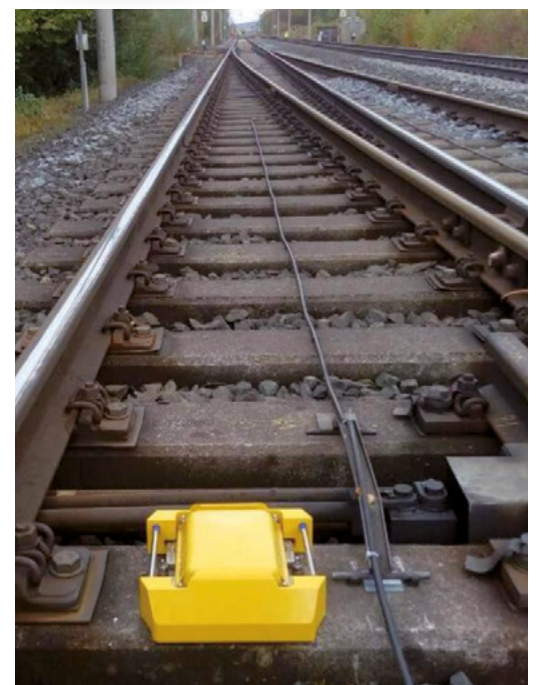
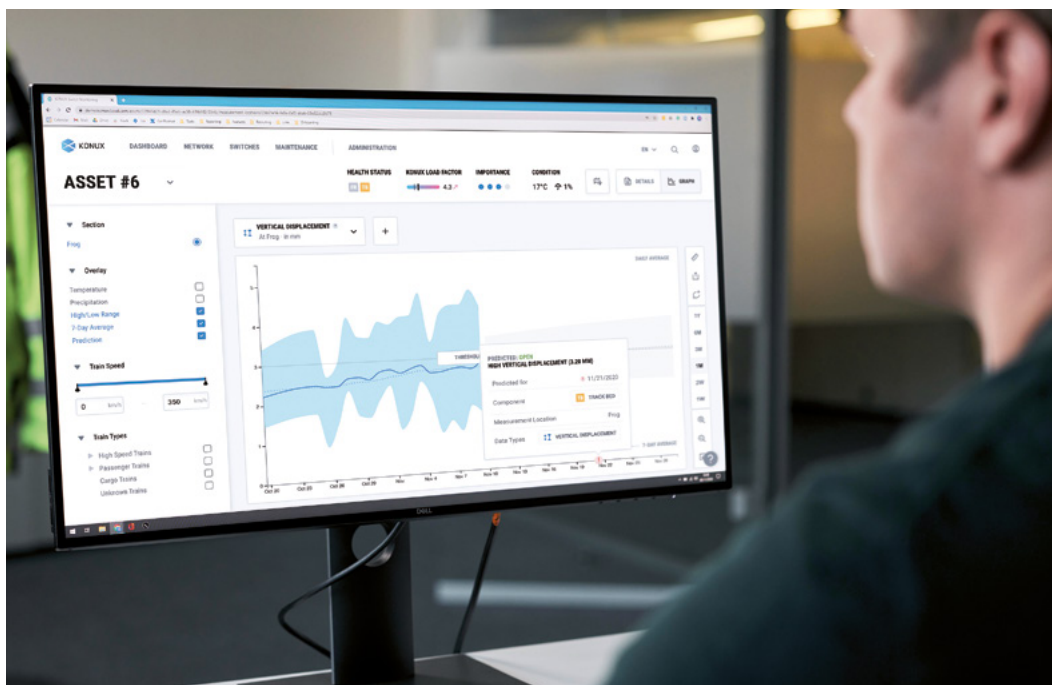
For Huschke Diekmann, Managing Director & Chief Revenue Officer of Konux, AI is a tool that helps people with mathematical models to make predictions that would otherwise be impossible. In many areas, the amount of data to be processed or the complexity is simply too great for a human to handle in a realistic time scale. This also applies to rail freight transport: Thanks to sensors and telematics, an increasing amount of real-time data is available. Konux specialises in infrastructures where data-based monitoring is still in its infancy. Countless track workers still check the tracks and switches as part of their arduous shift work. At best, they discover defects, but they are rarely able to anticipate faults in their infrastructure. The consequences are massive delays and a lack of reliability. This is harmful to the reputation of rail transport and makes it less competitive than road transport.

## AI enables predictive routine maintenance

Defective switches are the second most frequent cause of delays in German rail transport, and it was 9 years ago that Konux first started focusing on a condition-based service for switches. Since then, the company has received orders to monitor over 4,000 switches with its Industrial Internet of Things (IIoT)-analysis units. These constantly measure the condition of switches using various parameters and, thanks to the use of AI, detect possible weak points up to 90 days in advance. AI is based on more than 100 million data sets, which are continuously optimised by around 50 software analysts.

In the meantime, Konux has introduced the system in more than 10 countries, including Germany, the UK, Spain, Italy, the Netherlands and also in Asia. And the potential remains enormous: In Germany alone, there are still 25,000 switches on highly frequented lines that have not yet been digitised. According to Huschke Diekmann, whether operators use AI also depends on whether they dare to move away from classic manual inspection and embrace data-based AI recommendations.

"If the railway industry wants to achieve its ambitious objectives, it has little choice, especially considering the lack of personnel", concludes Huschke Diekmann.



Data-based switch monitoring with the IIoT analysis unit from Konux (see picture at left) helps to reduce traffic delays.

### Digital assistant reduces the workload of shippers in personnel planning

Gerrit Koch to Krax, CRO & Head of Transformation at Menlo79 GmbH, also sees enormous potential in the use of AI. Thanks to intelligent algorithms, the WILSON digital personnel assistant from Menlo79 efficiently organises all personnel planning and scheduling tasks of an RU without large investments. If employees or vehicles are absent at short notice, or if a route is closed or overloaded, it looks for a solution as quickly as possible. Within seconds, WILSON compares the services offered by the RU and the personnel data of the currently available employees with the requirements that the train journey to be staffed places on the personnel and shows the results to the shipper. The system also takes into account any preferences of the employees regarding early or late shifts or certain traction units.

Based on this, the shipper makes a decision, which WILSON evaluates at the end with a Smart Score according to its overall productivity: The shipper receives zero points for the most inefficient decision and full points for the most efficient decision. For this purpose, WILSON draws on more than 300,000 previous "real" dispatching decisions and "learns" constantly on the basis of new ones.

Since March 2023, eight RUs and personnel service providers have been testing the WILSON Share system enhanced by Menlo79 in a pilot and funding project. This enables the participating companies to free up temporarily available train drivers to another RU. The cross-company placement of railway personnel is intended to avoid bottlenecks in future and increase productivity within the industry.

### Greater transparency ensures faster decision-making processes

Iris Hilb, CEO of Wascosa, also sees AI as a major opportunity to optimise processes and digital-

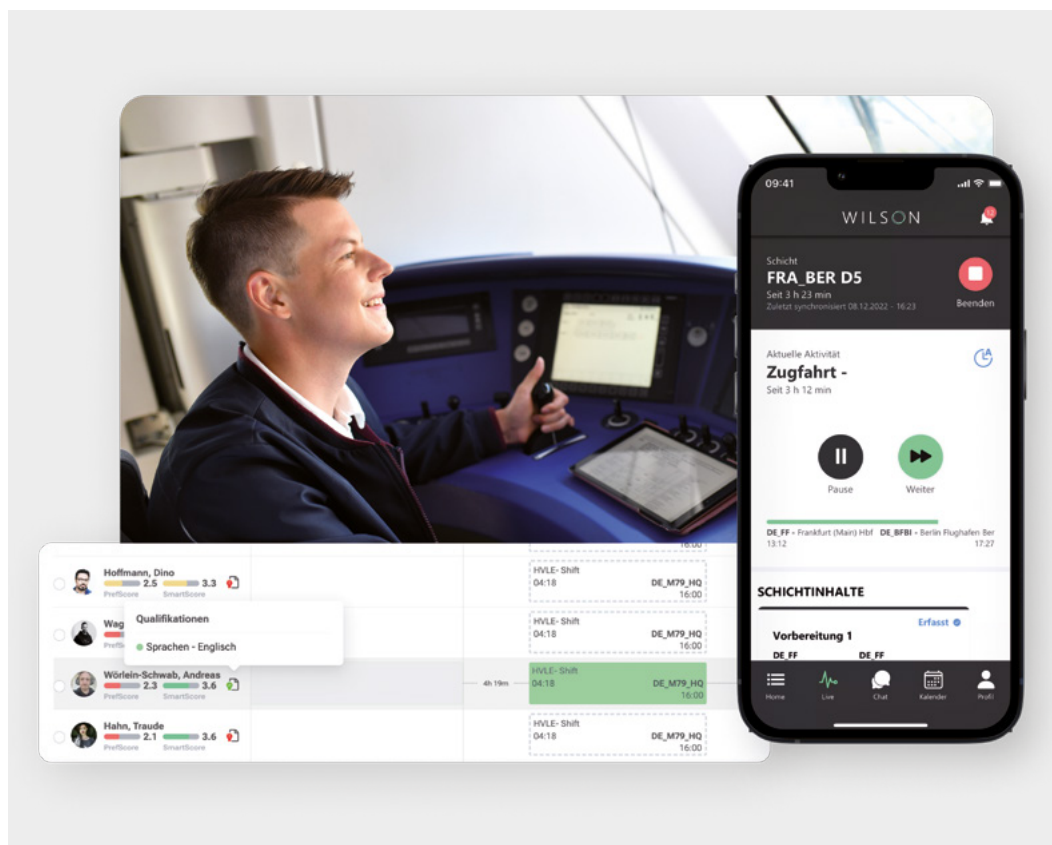


Photo: © Menlo79

Menlo79's digital personnel assistant WILSON helps with personnel planning and scheduling.

ly solve tasks that people used to do manually. This is why, AI is also being given a high priority in Wascosa's Future Module: "In my view, AI is the next level in the use of data to optimise processes. The technology is increasingly available and can quickly process data from various sources. The higher transparency will significantly accelerate decision-making processes. However, the indispensable basis for its implementation in our business is good data quality and sound process management. These factors should not be overlooked in all the euphoria."

## The RAILTALK innovation platform brings together expertise



The unique event and networking format RAILTALK unites experts and forward-thinkers who have a clear and common goal in mind: Driving innovation in the rail sector! The RAILTALKS talk show takes place four times a year. Here, current challenges in rail and logistics are discussed openly and from different perspectives. The audience receives new inspirations and options for action which they can implement themselves. RAILTALKS connects innovation drivers, solution providers and expertise partners, including Konux, Menlo79 and Wascosa.

Photo: © Menlo79

### About Menlo79 GmbH

The Berlin-based start-up Menlo79 has been developing intelligent and intuitive planning and scheduling solutions for an all-new employee and customer experience as well as improved productivity in rail transport and logistics since 2018. With their industry expertise and digital know-how, transport companies receive holistic support. The WILSON intelligent cloud-based software solution has been available since 2019. With WILSON, the start-up provided a modern and comprehensive workforce-management platform that enables employee-centric, intelligent and cross-company management of operational staff. With the RAILTALKS partner network, Menlo79 is also driving innovation and digitalisation in the rail sector in collaboration with partners.

### About Konux GmbH

Konux is a leading German AI scale-up that is transforming railway operations for a sustainable future. The company combines machine learning and IIoT to provide Software-as-a-Service (SaaS) solutions for automating operations, monitoring and maintenance processes. Konux increases capacity, reliability and cost efficiency to make railway systems the mobility solution of tomorrow. Since it was founded in 2014, Konux has received more than 130 million US dollars from leading global investors, expanded into ten countries in Europe and Asia, and was named one of the 30 most innovative start-ups and scale-ups in the world by the World Economic Forum (WEF).



# Intermodal freight transport in the EU: a long road ahead

In order to promote the shift of freight transport away from the roads to alternative modes of transport such as rail, the EU provided more than 1.1 billion euros for intermodality projects between 2014 and 2020. However, as a special report by the European Court of Auditors published at the beginning of 2023 shows, the EU is still far from reaching its goal. This article presents the most important conclusions of the report with regard to infrastructure. In order to achieve the environmental goals, the EU is called upon to tackle these challenges.

*Guido Fara, Auditor, European Court of Auditors*



Photo: © ECA

*In the 2020 Sustainable and Smart Mobility Strategy, the European Commission formulated a target of doubling rail transport by 2050 compared to 2015.*

Since 2011, the European Commission has developed targets for reducing greenhouse gas emissions coming from the transport sector. One way for achieving such targets is a substantial modal shift from road transport to rail, inland waterways or short-sea shipping. Intermodal freight transport could be an asset in this effort, combining different transport modes to take advantage of their relative strengths.

The European Court of Auditors published earlier this year a special report assessing the effectiveness of the EU's regulatory and financial support for intermodal freight transport since 2014. The auditors looked at several factors affecting the competitiveness of intermodality, namely the design and monitoring of the EU targets on intermodality, the support provided by the EU regulatory framework and the fitness of the EU infrastructure network for intermodality needs. This contribution presents the main conclusions as far as the infrastructure pillar of this audit was concerned.

## Linear infrastructure and transshipment terminals are of central importance

To consistently opt for alternatives to road-only transport, economic operators need (a) linear infrastructure, such as railway tracks, meeting the

necessary technical requirements, as well as (b) transshipment terminals to transfer freight from one transport mode to another.

While the EU is laying down requirements for its infrastructure network, the prioritisation of projects for implementation is the member states' competence. Notwithstanding the progress achieved, interoperability issues and bottlenecks remain. Two technical parameters stood out for their relative low compliance across the trans-European transport network corridors (TEN-T corridors) forming the backbone of the EU transport network.

## Train length and rail gauge: two parameters with low compliance rate

One of them is the train length, which is key in achieving economies of scale and improve the cost-effectiveness of intermodal transport. According to the European Commission, in 2019 only 53% of the TEN-T corridors allowed train operators to run 740-metre trains, which is the target length to be achieved by 2030.

The other parameter showing low compliance is the P400 rail gauge to accommodate large intermodal units. In this case, only 40% of the corridors allowed the operation of such trains,

with strong variation across member states (in the case of Spain only 6 % of the corridors were compliant).

## Need for terminals: overview is lacking

When looking at transshipment terminals, the EU auditors found that information on existing intermodal ones was difficult-to-access, with long and costly procedures for logistics operators to retrieve information when designing new routes. Moreover, at the time of the audit, the European Commission was about to issue recommendations on the digitalisation of the logistics chain. In the meantime, however, EU countries had started to develop their own national solutions, with variations in the type of information collected.

The auditors also found that the European Commission did not have an overview of the terminals already built and of those that still needed to be built or upgraded based on future market demand. The 2021 Commission's proposal to revise the TEN-T regulation (which is still going through the legislative process) and new conditions to obtain EU co-funding are however an opportunity to improve the situation, as member states will have to assess their needs for new terminals and share this information with the European Commission.



Photo: © ECA

Today, the European Commission does not have an overview of the terminals already built and of those that still needed to be built or upgraded based on future market demand.

### Delays in implementation and no monitoring of modal shift results

Finally, the auditors looked at a sample of EU funded infrastructure projects aimed at supporting intermodality. They found that their implementation often incurred delays, also due to an increased need of coordination among different entities. Moreover, the projects did not systematically estimate ex-ante or monitor ex-post their modal-shift results, hindering the possibility to identify good practices and common challenges when funding intermodal projects.

### Conclusion: Progress in all areas urgently needed

All these aspects will need to be urgently addressed if intermodal freight transport is to increase its competitiveness against road-only transport and effectively contribute to the EU green transport objectives.

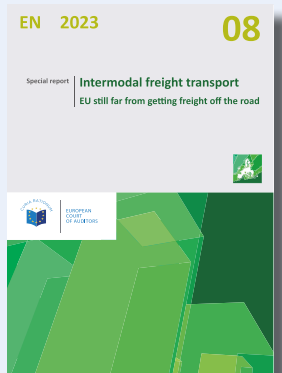
### Special report 08/2023 of the European Court of Auditors

The special report 08/2023 "Intermodal freight transport: EU still far from getting freight off the road" is available on the European Court of Auditors' website ([eca.europa.eu](https://eca.europa.eu)). In addition to identifying the obstacles and problems that continue to hamper the shift of freight transport to rail and inland waterways, the EU Court of Auditors makes a number of recommendations to the EU Commission to improve the effectiveness of EU support in this area: The Court recommends that the Commission,

1. set targets regarding the modal share along the Core Network Corridors and report on them;
2. prepare regulatory changes to improve the competitiveness of intermodal transport;
3. lay the groundwork for a coordinated assessment by member states of intermodal terminal needs;
4. assess the modal shift potential in cost-benefit analyses for EU-funded projects.

"Decarbonising transport is at the core of the EU goal to reduce greenhouse gas emissions, as laid out in the European Green Deal. Although intermodality is a key tool in that effort, the EU freight transport is not on the right track."

*Annie Turtelboom, member of the European Court of Auditors*



# Calendar of events

Due to the uncertain world situation, changes in dates are still possible at short notice.  
It is recommended to consult the individual websites of the organisers for the firm dates.

Date	Event	Location	Website
<b>2023</b>			
05.12.2023	RNE General Assembly	Vienna, AT	<a href="http://rne.eu/calendars">http://rne.eu/calendars</a>
07.12.2023	5G RAIL Final Conference	Brussels, BE	<a href="https://www.unife.org">https://www.unife.org</a>
07.12.2023	RFG Xmas Lunch	London, UK	<a href="http://www.rfg.org.uk">www.rfg.org.uk</a>
15.12.2023	103rd UIC General Assembly	Paris, FR	<a href="https://uic.org/events">https://uic.org/events</a>
<b>2024</b>			
08.-09.01.2024	New Year's reception and 14th VPI Symposium	Hamburg, DE	<a href="https://vpihamburg.de/en/">https://vpihamburg.de/en/</a>
29.01.2024	European Railway Award 2024	Brussels, BE	<a href="https://www.unife.org">https://www.unife.org</a>
30.01.2024	RFG Member's Party	London, UK	<a href="http://www.rfg.org.uk">www.rfg.org.uk</a>
31.01.-01.02.2024	17th BME/VDV Rail Freight Transport Forum	Berlin, DE	<a href="https://www.bme.de/">https://www.bme.de/</a>
07.-09.02.2024	Fruit Logistica	Berlin, DE	<a href="http://www.fruitlogistica.com/en/">www.fruitlogistica.com/en/</a>
20.-22.02.2024	13th International Railway Summit	Paris, FR	<a href="http://www.irits.org">www.irits.org</a>
29.02.2024	Swiss Symposium on Railway Safety	Basel, CH	<a href="http://www.bahnverband.ch">www.bahnverband.ch</a>
06.-07.03.2024	Rail Tech Europe	Utrecht, NL	<a href="https://events.railtech.com">https://events.railtech.com</a>
19.-21.03.2024	Semaine Internationale du Transport et de la Logistique (SITL)	Paris, FR	<a href="http://www.sitl.eu">www.sitl.eu</a>
April 2024	F&L Meeting	Italy, IT	<a href="http://www.europeanfreightleaders.eu">www.europeanfreightleaders.eu</a>
11.-12.04.2024	IBS Spring Group Meeting	Helsinki, FI	<a href="http://www.ibs-ev.com">www.ibs-ev.com</a>
16.-19.04.2024	Intertraffic Amsterdam	Amsterdam, NL	<a href="http://www.intertraffic.com">www.intertraffic.com</a>
17.04.2024	VPI Austria General Assembly	Vienna, AT	<a href="http://www.vpirail.at">www.vpirail.at</a>
April/May 2024	VAP Rail Freight Forum	Zurich, CH	<a href="https://cargorail.ch/en/">https://cargorail.ch/en/</a>
15.05.2024	RFG Spring Group Meeting	London, UK	<a href="http://www.rfg.org.uk">www.rfg.org.uk</a>
15.-16.05.2024	The Rise of IoT & Big Data in Rail	Cologne, DE	<a href="https://iotandbigdatainrail.com">https://iotandbigdatainrail.com</a>
15.-18.05.2024	Transport Research Arena (TRA)	Dublin, IRL	<a href="https://traconference.eu/">https://traconference.eu/</a>
16.05.2024	RNE General Assembly	Vienna, AT	<a href="https://rne.eu/calendar/">https://rne.eu/calendar/</a>
16.05.2024	UIRR General Assembly	Brussels, BE	<a href="http://www.uirr.com">www.uirr.com</a>
22.-24.05.2024	ITF Summit 2024	Leipzig, DE	<a href="http://www.itf-oecd.org">www.itf-oecd.org</a>
30.05.2024	UIP General Assembly and Keepers' Summit	Venedig, IT	<a href="https://uiprail.org">https://uiprail.org</a>
10.-12.06.2024	VDV Annual Meeting 2024	Dusseldorf, DE	<a href="http://www.vdv.de">www.vdv.de</a>
10.-13.06.2024	Technical Meeting	Bratislava, SK	<a href="https://rne.eu/calendar/">https://rne.eu/calendar/</a>
11.-13.06.2024	Multimodal	Birmingham, UK	<a href="https://www.multimodal.org.uk">https://www.multimodal.org.uk</a>
19.06.2024	VPI Get Together and General Assembly	Dusseldorf, DE	<a href="https://vpihamburg.de/en/">https://vpihamburg.de/en/</a>
20.06.2024	24th Technical Information Event	Dusseldorf, DE	<a href="https://vpihamburg.de/en/">https://vpihamburg.de/en/</a>
24.-27.09.2024	InnoTrans	Berlin, DE	<a href="http://www.vdv.de/innotrans.aspx">www.vdv.de/innotrans.aspx</a>

## Impressum

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# Competition: Find 10 mistakes

Over the past 20 years, technically experienced readers have correctly pointed out mistakes that have crept into Wascosa infoletters from time to time. Now, the challenge is on: Compare pictures 1 and 2 below, and find the ten errors in picture 2 and mark them. Send us a scan or photo of your answer along with your address to [marketing@wascosa.com](mailto:marketing@wascosa.com) by 22 December 2023 at the latest and with a bit of luck you could win a Lucerne delicacy.

## Notes on competition participation:

20 winners will be drawn from the correct answers submitted. All readers of the Wascosa infoletter are eligible to participate. Employees of Wascosa AG are not eligible. The winners will be notified in writing. No correspondence will be entered into regarding the competition. No cash payments and no legal recourse are possible. Participation in the prize draw is independent of any current business cooperations.

