

DACHSER magazine

The world of intelligent logistics _



On demand

Availability is everything. Storing, preserving, and saving are core virtues of Homo economicus and drivers of progress.

12,000 gold francs

was the amount offered by Napoleon Bonaparte as a prize in a 1795 competition for the best preservation method. His aim was to improve the food supply for his ever-growing army. The prize was won by Parisian inventor Nicolas Appert, who came up with the idea of preserving fruit and vegetables by putting them into a jar, heating it up, and sealing it airtight. This sterilization procedure offered entirely new possibilities for storage and made "fresh" food readily available at all times.





3.5 million oak piles, rammed into the boggy ground with novel steam hammers—these support the brick buildings of Hamburg's warehouse district, built between

1883 and 1927. This made it possible for Wandrahm and Kehrwieder, two former islands on the Elbe river, to become home to the world's largest warehouse complex. Each of the warehouses, which contained commodities such as coffee, tea, tobacco, and spices, had road and river access. Today, this UNESCO world heritage site is not only home to this large historic storage space, but it is also part of Hamburg's HafenCity, Europe's largest urban development project.

3.75 MI

was the storage capacity of the world's first magnetic hard drive. Its story goes back to the early 1950s, when technicians at IBM (International Business Machines)

connected 50 magnetic disks that were stacked on top of each other in the IBM 350 hard disk drive. First introduced in 1956 in the legendary IBM 305 RAMAC computer, this system was the size of a wardrobe and, including its cooling system, weighed close to a metric ton.





6 Dercent of the total area of Ontario, California is take up by more than 600 warehouses owned by various companies, making the city east of the total area of Ontario, California is taken

of Los Angeles one of the world's most important logistics hubs. The site greatly benefits from its location in the greater Los Angeles area close to ports, airports, and major highways. Amazon is currently building a 376,722 m² warehouse there—its largest in the world. As of 2024, the facility will handle 125 million shipments per year.

billionth of a second

is the time it takes for a memory cell in a magnetoresistive random-access memory (MRAM) to be ready to work at the push of a button. These cells don't require power to record data, which makes it redundant to boot the computer or leave it in standby mode. Given the quantity of computers used today, this technology could save an amount of power equivalent to that produced by entire power stations.



Message from the CEO

Dear readers,

In these turbulent times, wouldn't it be great to have a crystal ball that shows us the future and where to focus our efforts? But instead, what we have is an almost unpredictable and ever more complex mesh of crises, war, and climate change, resulting in increasing volatility and rising economic and geopolitical uncertainty.

This issue of the DACHSER magazine explains how Dachser and its customers are managing to increase supply chain resilience under these complex conditions. The cover story deals with current frictions and transformations in trade and global logistics. And our best-practice story is about tailored end-to-end solutions for our customer WorldConnect. What matters most to Dachser in all this is addressing the key challenges of the market with efficient network services and competent, committed, and motivated employees.

We accomplish this on a regular basis. And that's why I'm convinced, despite current economic prospects being rather subdued, that crises can create opportunities. Antoine de Saint-Exupéry put it best when he said, "As for the future, your task is not to foresee it, but to enable it." This is certainly not an easy task—but it doesn't require a crystal ball.

Kind regards,

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Burkhard Eling, Dachser CEO



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Crossdocking Links to the digital world of Dachser

H_2 – The drive of the future? Dachser commissioned researchers at Kempten University of Applied Sciences to investigate how the company might use hydrogen in its Road Logistics network. Read more about the findings of the "H $_{\rm 2}$ infrastructure and logistics" study here: https://bit.ly/DAmag_04_22_Hydrogen_study

Welcome to Belgium!

Since the beginning of April, Dachser Food Logistics has been operating its own facility in Belgium. Branch Manager Markus Biemüller talks about how the launch went and what opportunities it opened up.

https://bit.ly/DAmag_04_22_Interview_Belgium



Milestone achieved

Dachser has set up dedicated truck routes to the Hong Kong airport for customers with production facilities in China, enabling air and sea deliveries despite COVID-19 transport restrictions

https://bit.ly/DAmag_04_22_Cross_border_trucking



Strongest in Finland

Suomen Asiakastieto, a Finnish service offering business and consumer information, has awarded Dachser Finland Air & Sea Logistics Oy the "Strongest in Finland" certificate. Read more about the award and rating. https://bit.ly/DAmag_04_22_Strongest_in_Finland



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Changing times: Six theses on supply chains in flux



The world is changing: not only are digitalization, climate change, and new geopolitical courses creating challenges for policymakers, the economy, and society, they are also redefining the role of logistics. Here are six ways that Dachser believes current transformations are affecting global supply chains.

Even before it has actually come to an end, 2022 has secured its place in the history books. In addition to Russia's war of aggression against Ukraine, it has given us container traffic jams and rigid coronavirus lockdowns in China that have disrupted supply chains and led to supply bottlenecks. It has seen Europe's fuel and energy costs skyrocket and new economic blocs form with no indication of how this will impact global trade and the inner workings of a world economy based on the division of labor. And as if that weren't enough, we are now feeling the effects of climate change in the form of extreme weather events that demand medium- and long-term regulatory solutions to be part of the political agenda. You don't have to be a prophet to predict that, having seen so many disastrous events and developments come to a head, 2022 will stand as a symbol of changing times that will also leave a deep mark on how logistics sees itself. Long-established modes of customer and supplier relationships are beginning to branch off in new directions.

Will geopolitics become a game changer for supply chain management? Dachser CEO Burkhard Eling summed it up nicely when he spoke at the recent BVL International Supply Chain Conference in Berlin: "Our customers are under tremendous pressure to change their sourcing structures. This includes repositioning themselves regionally and making more use of warehousing." At the same time, this means that "if the logistics industry has to deal with more complexity, this will be reflected in how much it charges and what kind of services it offers," Eling says. He adds that it's time to rethink just-in-time concepts, and what counts is guaranteeing security of supply.

However, Eling does not believe that this spells the end of globalization: "Sourcing will always happen on a global scale, but the conditions have become much more complex and intricate." He believes that Dachser, like the majority of its customers, will therefore continue to align its business clearly toward global trade and global supply chains.

Such reevaluations of logistics and supply chain management raise the question of what conditions will define these changing times and how logistics providers and their customers can shape this transition. According to the British economist John Maynard Keynes (1883–1946): "The difficulty lies not so much in developing new ideas as in escaping from old ones." \rightarrow



Our customers can build on our experience and our network to adapt their supply chains both operationally and strategically to changing conditions.

Burkhard Eling, Dachser CEO

In other words, the potential sea change in trade and the economy also means establishing a new paradigm and a new conception of value chains, production conditions, and supply relationships. Dachser has distilled this into six theses for constructively shaping a transformation that will usher logistics into the future.

1. The establishment of economic blocs is changing global trade.

Many manufacturing companies are concerned about the technology and trade dispute between China and the US, which is causing the trade areas dominated by each country to increasingly decouple. This is accompanied by import and export bans for the likes of computer chips, networking hardware, and base materials such as rare earths and certain chemicals. Then there are usage bans on commercial software and limitations on data transfer.

Possible actions to address supply chains in flux: A checklist

Strategic concepts for increased resilience

- Plan logistics networks with great care
- Factor in geopolitical issues
- Be selective when it comes to supplier and producing countries
- Reassess sourcing structures
- Expand warehousing

Operational concepts for increased efficiency

- Ensure all partners are reliable
- Consider safety aspects
- Optimize the quality of all logistics services
- Avoid "overheating" supply chains

In light of this situation, dependencies on individual countries and regions are increasingly being seen as risky. At the same time, Asia is home to economies—China in particular, but also Indonesia, Malaysia, Vietnam, and other countries in the Indo-Pacific region—that are and will remain key production locations and marketplaces for manufacturing companies and thus for logistics.

This forces decision-makers to acknowledge one of logistics' special qualities: "Logistics is the art of creating and organizing networks," Eling says. "Intelligent network management coupled with a high degree of transparency and flexibility along the entire supply chain can make logistics a crucial factor in healthy global competition, which in turn promotes self-determined growth in all regions of the world. This benefits many of Dachser's customers that are active in markets around the world."

2. The division of labor and globalization will endure.

"Instead of turning away from globalized economic flows, it's more effective for companies to diversify in order to safeguard themselves against risk," says Marcel Fratzscher, Professor of Macroeconomics at Humboldt-Universität zu Berlin and President of the German Institute for Economic Research (DIW Berlin). "It's too dangerous to put all your eggs in one basket or rely on a single location." To do so leaves a company with no fallback should things go wrong.

But Fratzscher says that in the US and Europe, reshoring and nearshoring would prove too expensive: "A drug that can be produced for EUR 3 an hour in Vietnam would cost more like EUR 30 in Berlin. Who could and would want to pay that? What's more, Berlin and the rest of Germany lack the necessary workforce. So there really is no alternative to globalized goods flows."

Does this mean that everything will essentially stay the same? Hardly. It is becoming apparent that current crises are rewriting the rulebook for globalization and the division of labor: for instance, one way to restructure supply chains is to move toward dual sourcing. This means establishing a broader supplier base in multiple countries and, most importantly, regions around the world. Companies are also focusing more on vertical integration—in other words, generating more added value themselves rather than buying it. And many businesses are expanding their warehouse space to a considerable degree.

"In the past ten years, Dachser's storage volume has basically doubled," Eling says. He adds that in the first half of 2022, the total capacity increased by around 90,000 pallet spaces to some 2.5 million pallet spaces compared to the same period the year before.

"For a long time, supply chains were pared back to maximize efficiency, with structures kept as simple as possible. Now that they're becoming more complex again, they're harder to manage," Eling says. "This plays into Dachser's core competencies. Together with our customers, we're engaging in consultancy projects to closely analyze global supply chains with a view to optimizing them. These projects result in tailored solutions based on end-to-end management of logistics processes and advanced digitalization for optimum supply chain visibility."

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3. Geopolitical changes call for clear strategies for resilient logistics networks.

The overriding goal is always to optimize supply chain resilience by taking a holistic approach. This is of vital importance because, for some time now, logistics systems have been "overheating" due to increasingly complex, globally intertwined supply relationships and the pushing of transport capacity to its very limit. Over the past few years, the risk of disruption to supply chains has grown considerably. This is now forcing companies to consider geopolitical and societal factors and developments to a greater extent than they used to when calculating effort and costs.

Just as policymakers must act immediately in a crisis, companies and their logistics partners have to respond as quickly as possible to disruptions. Politicians are currently discussing a "friendshoring" approach in which Western industrialized countries shift a larger share of their supply chains to politically friendly economies in order to secure access to important raw materials and other products. However, this approach is not feasible in the short term and, moreover, not very practical. Instead, Dachser advocates comprehensive global logistics concepts that have been established in close collaboration with customers. These are based on consistently setting up and expanding resilient networks-with uniform processes, smart IT systems, and employee expertise. Here, the direction of change is always clear: "By increasing the resilience of global supply chains against disruptions, we are fulfilling our customers' number one requirement," Eling says.

4. Supply chain resilience has both strategic and operational dimensions.

"Supply chains are not simply going to go back to how they were before the current disruption happened," says Professor Thomas Wimmer, Chairman of the Executive Board of BVL and lecturer in applied procurement, production, and contract logistics at the University of Bremen. "Once we've made it through the current crises, different ones will take their place and present new challenges. Resilient supply chains require a radical rethink of many processes—not least shifting focus away from costs and more toward the new priorities of reliability and sustainability."

However, gearing processes toward operations alone is not enough. What really counts when designing resilient supply chains is the interplay with other strategic factors that also take into account geopolitical transformations and societal changes. "Our customers recognize the value of reliable logistics solutions—and reliability is currently their top priority," Eling says. He adds that in the future, choosing the right producing countries and supplier locations will play a major role in the resilience of supply chains. Dachser is in a position to create global transport solutions that offer customers the relevant network benefits and the expertise required to avoid as many bottlenecks as possible. "Our customers can build on our experience and our network to adapt their supply chains both operationally and strategically to changing conditions," Eling says.

5. Energy, logistics space, and personnel are becoming crucial location factors.

How companies go about selecting locations around the world—and thereby also shaping supply chains—is being influenced more and more by resource scarcity. Logistics space is currently in short supply and expensive, especially for warehousing. Moreover, sharp increases in fuel and energy prices are now causing problems for many companies. The high cost of diesel, AdBlue, power, and gas is putting a strain on the entire logistics sector. Since these price jumps are particularly hard on transport companies, Dachser is doing what it can to help them by paying invoices promptly. \rightarrow

A network for resilience

Another aspect of ever greater importance to Dachser's customers is climate action. Looking beyond all the short-term disruptions, climate change will have a major impact on global trade in the decades to come. Many companies are already considering sustainability when selecting their subcontractors and suppliers and making purchasing decisions. They are also under increasing pressure to report their carbon footprint.

This is why Dachser is proactively driving forward research and innovations related to renewables. The company will quadruple photovoltaic capacity at its facilities by 2025 and is conducting practical tests of electric and hydrogen-powered vehicles. Dachser also switched all its locations worldwide to 100 percent green power at the beginning of 2022.

These days, the struggle over limited human resources in industrialized countries is playing out across all sectors. In times of demographic change, this struggle will not be won through recruitment alone. This is why Dachser invests in training, in attractive compensation and working models, in providing employees with state-ofthe-art technology, and in professional development opportunities.

6. Values are a strategic concern in an uncertain world.

"Acting in a sustainable, value-oriented manner and behaving responsibly toward future generations is already part and parcel of corporate policy-both at Dachser and for many of our customers," Eling says. "It's about having a living framework of values, a compass that guides a company especially in times of crisis and confrontation." He adds that this principle of living values is increasingly helping companies choose where in the world to have locations, and it is ultimately reflected in their responsibility toward employees. "At Dachser, the values framework plays a key role: we're active in all major economic areas, but as a medium-sized family-owned company, we don't have to be everywhere. Anytime we're considering entering a new market, we check very closely to see whether doing so would be in line with our core corporate values and stringent compliance rules."

"Logistics is people business-especially in times of crisis," continues the Dachser CEO. "Human rights, healthy and fair working conditions, and clear compliance rules are non-negotiable." Eling says that mandatory observance of the relevant rules, such as will be required by Germany's Supply Chain Act, are already par for the course at Dachser. It is also becoming more and more important to customers as they, too, strive for sustainability. "Just as our employees around the world identify with Dachser and the Dachser values, our company is committed to fulfilling its responsibility to its employees in each country," Eling says.

Conclusion

What does all this mean for the logistics industry going into 2023? "The crisis mode of the past two and a half years has made customers more aware of logistics and the value of reliability particularly in difficult times," Eling says. "When and how the economy will recover and whether 2023 will bring further uncertainties and upheaval to the world remains to be seen."

Eling cuts right to the heart of the matter, saying: "Resilience is becoming the crucial factor in designing future-proof supply chains. The way to get there is to act in a way that is based on values, is designed for the long term, and encompasses the necessary motivation and adaptability. This is exactly what Dachser's network brings to the table in all its dimensions—physical, digital, and related to our employees—and what makes it so successful." **M. Schick** What are companies doing to weather crises well? Management consultancy McKinsev & Company recently posed this question to more than 70 supply chain managers at leading companies around the world. Their answers revealed that during the coronavirus crisis, over 90 percent of the companies invested in their supply chains to make them more resilient against external disruption. They are also making much more use of digital technologies than at the start of the pandemic. These include real-time monitoring and AI-based analytics.



People & markets

Learning to drive in the virtual warehouse

This is no ordinary warehouse: forklifts whiz along the aisles, lifting loads from shelves and maneuvering through tight and tricky situations. Again and again, unexpected encounters occur that require quick reactions. In other words, it's made for beginners. To train people in intralogistics, industrial vehicle manufacturer Linde Material Handling has developed a forklift simulator that works like a computer game and lets "players" experience various material handling situations in a virtual warehouse. With the help of a VR headset and a controller, operators can learn the various work steps in the virtual warehouse without any risk. According to a study by consulting firm Kearney, gamification projects increase job satisfaction by up to 24 percent and employee motivation by up to 33 percent. They can also improve productivity by up to 4 percent and reduce error frequency by up to 3 percent.





They just want to play

"Teaching is where one person speaks and everyone else sleeps," goes an old German playground saying. Knowledge imparted in a lecture format, as in conventional teaching, has a reputation for being rather fleeting. Scientists at the University of Cambridge in the UK have shown how to do things better in a study involving around 3,800 children. Lessons using what's called "guided play" produce significantly better results than conventional instruction in the acquisition of early math skills and in the ability to switch back and forth between different tasks. In adult education, such insights are reflected in the concept of cooperative learning: through this playful process, participants can "co-construct" knowledge, according to Christoph Helm, Head of the Department of Educational Research at the Linz School of Education in Austria. He cites empirical surveys that show that this leads to "meaningful learning." Learners not only understand new content better, but also retain it over the long term.



Play is serious business

The global market for gamified learning continues to grow. Industry experts estimate that the "serious games" market will mushroom from USD 3.5 billion in 2018 to USD 24 billion in 2024. (Source: Statista)

The metaverse of learning

VR headsets and artificial worlds are currently still associated mostly with computer games; the technology hasn't really spread to the public at large. But things are starting to happen regarding virtual worlds. Have you heard the word "metaverse"? It describes a merging of the digital world with reality. "The metaverse will be the successor to the mobile internet," predicted Mark Zuckerberg last November, when he announced that the name of the company he co-founded, Facebook, would be changing to Meta. In doing so, the US company wanted to publicly lay claim to its metaverse territory as early as possible. The education sector is likely to benefit from this, too. Meta has already released a promotional film that shows prospective surgeons playfully trying out new surgical techniques with VR headsets, students visiting virtual lecture halls, and history buffs being transported to ancient Rome-in the same immersive way as a cutting-edge computer game. But patience and development work are still required: Meta estimates it will take another ten years before many of its current ideas and plans are ready for implementation. According to a study commissioned by the company, the metaverse could then contribute around USD 440 billion to Europe's gross domestic product.



Virtual school of life



Soft-skills training for executives that incorporates virtual reality is more efficient than traditional learning methods such as classroom instruction and e-learning. This is a finding of a study by consulting firm PwC, which surveyed prospective managers at twelve locations who were learning soft skills for their future tasks over a period of several months. The group that learned using virtual reality reported a 275 percent boost in confidence and four times the focus of their e-learning peers. Learners with VR headsets also completed the training four times faster than those in the classroom. According to the study, this means that the initial investment in virtual learning is worthwhile at scale: at 3,000 learners, the VR modality is 52 percent more cost-effective than classroom learning.

Panorama

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Utter-ly convincing

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A science and an art form: In ancient times, rhetoric was essential to forming an opinion—and after a long period of hibernation, it is reemerging into the limelight.

Silence is golden, goes the old saying. Gorgias of Leontinoi knew better. Born around 490 BC in Sicily, his gift of gab made him a wealthy man during his lifetime. As he traveled through ancient Greece, the philosopher held public lectures everywhere he went, building a reputation as a captivating speaker. This attracted people to the rhetoric classes that Gorgias also offered; wealthy contemporaries paid lavish fees to learn from him. Not exactly the shy and retiring type, the scholar liked to drape himself in priest-like purple robes—and commissioned a golden statue of himself at Delphi.

Gorgias's great success with his business model had much to do with the social tenor of his time. Greece's flourishing trade changed the economic landscape and produced a middle class as the power of the nobility crumbled. Political decisions were shifted to public assemblies, where all adult male citizens were allowed to speak. The legal system in the city-states also changed radically: to settle disputes, everyone was now allowed to present their concerns in person before courts run by laypeople. No wonder, then, that oratory training was in such demand.

Ancient Greece produced practical guides for orators as well as theoretical treatises on rhetoric. Around the same time, oratory was flourishing in China and the Arab world—similarly driven by social and economic transformation. Numerous ruling houses wrestled with one another economically, technologically, and culturally. In the conflict between various schools of thought, the argumentative debate format gained momentum. Philosophers were intensely concerned with the means by which words can wield the greatest power. China called this "xiucixue"; however, "the teaching of the arrangement of words" was often at odds with the truthfulness demanded by Confucius, which results from matching words to the subject matter.

Renewed relevance for everyday life

The analyses of ancient thinkers are popular again today. No communication training course is complete without references to Aristotle, who, among other things, analyzed the individual steps of producing a speech in great detail. The sayings of Confucius are also favorites for quotes and references. In general, rhetoric as a practical art is back in high demand after a long period of hibernation: in the Middle Ages, for many centuries it was mainly monarchs who held sway, leaving little room for public debate. Rhetoric continued to be cultivated as a science, at least in Europe, but only a few elites had the privilege of learning it.

With the modern era, rhetoric gained new relevance in everyday life—not only in the political sphere, but in the business world as well. Industrial mass production made goods affordable and increased the range of choices, so it became increasingly important for companies to promote their products. They soon learned that anyone who merely recites a list of technical data will quickly be drowned out. Companies that can explain why their product is indispensable to customers and makes their lives easier fare much better. A shining present-day example is the computer company Apple, whose rise would hardly have been conceivable without the brilliant product presentations of Steve Jobs.

Nowadays, the face-to-face communication that the ancient rhetoric masters had in mind is no longer the norm. Debates are often asynchronous and conducted across various media channels: books and newspapers, radio and television, and increasingly on social media. Yet rhetoric experts argue that this does not diminish the importance of their field. On the contrary: speakers and writers still aim to sway their audiences with words. In these times of fake news, rhetoric is perhaps more in demand than ever as an analytical tool that exposes bogus arguments, lies, and attempts at manipulation.

Computers get a say

The question of what makes words so persuasive is also a critical one when training artificial intelligence. Technology corporations are devoting plenty of computing power and large teams to the task of turning computers from simple receivers of commands into conversational partners. And while this goal still seems a long way off for voice assistants like Alexa or Siri, the progress being made elsewhere is impressive: the GPT-3 program developed by OpenAl, for example, now churns out short stories, blog posts, and marketing texts that at times actually look and sound like they were written by a human.

Despite all the doomsayers, digitalization does not mean the end of traditional speech-giving. Quite the opposite, in fact: today's YouTube videos and podcasts enable an absorbing presentation to quickly reach an audience of millions, as demonstrated by the TED Talk series, which emerged from a tech conference. Good speakers are also still in demand in the analog space: companies cultivate formats like town hall meetings, and no one would dare organize a trade show or conference without keynote speakers. Some of the speakers earn their living with these appearances—and collect fees that probably would have won the respect of none other than Gorgias of Leontinoi. **S. Ermisch**



A new take on **logistics procurement**

In light of strained supply chains, logistics is increasingly becoming a competitive factor for the chemical industry. A recent study entitled "Procurement of logistics services in the chemical industry," which was supported by DACHSER Chem Logistics, offers concrete recommendations. Christian Kille, Professor of Retail Logistics and Operations Management at the University of Applied Sciences Würzburg-Schweinfurt, recently presented the study together with Dr. Andreas Backhaus and Constantin Reuter at the Dangerous Goods // Hazardous Substances trade fair in Leipzig. Times have changed. Supply chain disruptions, which result in delays and material bottlenecks, as well as reductions in the available capacity in logistics have demonstrated to companies in general, and particularly in the chemical industry, that they can only do so much. Until a few years ago, it was common practice when procuring logistics services to go with the cheapest provider and still expect excellent service. Such is the nature of a typical buyer's market.

In the past three years, however, the market has morphed into one driven by supply. And despite a looming recession, this is unlikely to change. Reasons for this include a lack of qualified personnel, particularly drivers. In addition to soaring energy prices, this often presents a much greater challenge to chemical companies than to other industries. After all, chemical companies produce special goods—including dangerous goods. Handling these requires special equipment and know-how.

The recent study clearly shows that chemical logistics procurement needs to adapt to these challenges if it is to continue to contribute to corporate success in the future. This means that those procuring chemical logistics services need to expand their knowledge so that they can select the right logistics solutions and partners. But they also need to tailor the procurement process to each situation—in short, a more customer-oriented approach is called for. In many sectors and corporate divisions, this is a well-established notion. In many areas of procurement, however, it is still quite new. After all, many procurement officers believe that customer orientation is the job of the sales department.

With a view to developing such a tailored procurement process and providing concrete recommendations, the study featured the customary market and process analyses, but also asked the chemical companies themselves what they think. The result is a procurement process that involves seven steps and poses 30 questions specifically about the procurement of transport services. It provides guidelines that help procurement officers choose the best solution in these challenging times and thus continue to enhance corporate competitiveness.

Overall, the study's analyses call for a change in perspective in the procurement of chemical logistics:

Customer orientation: The user is the procurement officer's customer for whom the logistics service is organized. Potential users are from production, sales, and purchasing. The user's requirements need to be understood and woven into the tender to guarantee security of supply in a tailored manner.

Overall-process orientation: Not only are the user's requirements diverse; unless they are understood and embedded in the overall process in particular to avoid follow-up costs caused by, say, quality losses—supply efficiency can be compromised.

If procurement officers understand every aspect of how this works, the procurement of chemical logistics is prepared for the altered environment.

"Bad" procurement costs money

The study also shows that the quantifiable KPIs of the costs or prices of purchased logistics services do not reflect the total costs for the company. This is because errors in the logistics chain can disproportionately affect a chemical company's total costs. The less attention paid to a logistics partner's performance and quality, the more likely it is that errors will occur. Furthermore, an overall assessment of the logistics process that takes all parties into account enables cost savings that can be neither recognized nor increased if transport logistics is viewed in isolation. In fact, insufficient coordination or synchronization can even lead to additional costs elsewhere.

These findings can be distilled into six recommendations for the procurement of chemical logistics:

- 1. Building specific logistics expertise should play a fundamental part in the procurement of chemical logistics.
- All procurement activities ought to focus on the chemical logistics user.

- Sufficient time and effort should go into creating the tender, especially when it comes to identifying goals, requirements, and general conditions.
- 4. Comprehensive knowledge of the market is crucial for implementing a competitive logistics solution.
- 5. Narrow scopes of implementation and rigid contractual conditions are to be avoided.
- 6. An exchange of information between the parties in the value chain should be an integral part throughout the term of contract.

Keeping an eye on the entire logistics process

So what does bad procurement cost? The study does not quantify costs because they vary from case to case. However, it does offer tips for cutting existing costs down and avoiding additional ones. Ideally, procurement helps raise logistics performance while reducing overall process costs. Ch. Kille



Prof Christian Kille teaches retail logistics and operations management at the University of Applied Sciences Würzburg-Schweinfurt, where he is in charge of the business administration program. He was previously Head of Market Intelligence at Fraunhofer SCS in Nuremberg. His research focuses on logistics forecasts and trend analysis as well as retail logistics and logistics real estate.



If you're interested in reading more of the study, please contact DACHSER Chem Logistics: chemlogistics@dachser.com



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Working together to connect **the world**

Travel adapters ensure that people can power their devices anywhere in the world. Swiss manufacturer WorldConnect AG wanted to increase its delivery speed for these products and get closer to its customers, so the company partnered with Dachser to reorganize its logistics.

It's something that international business travelers and globe-trotters should never leave home without. The realization that they've forgotten to pack the travel adapter tends to come once the battery in their smartphone, laptop, or electric toothbrush starts to die. Many countries means many different standards, which is why not every plug fits every outlet. Travel adapters solve this problem. \rightarrow

Perfect for globe-trotters: The universal travel adapter



It's definitely better to know you have a logistics partner close by who can solve your problems and, most importantly, you can have personal contact with.

Christian Ernst, Co-CEO of WorldConnect AG

Based in Switzerland, WorldConnect AG is the world's leading premium manufacturer of these little helpers. Under the SKROSS brand, the company markets high-quality adapters featuring the patented sliding system for use in over 150 different countries. The top sales venues are duty-free shops in airports all over the world, as well as in-flight shops and retail stores. WorldConnect AG's range of products and travel accessories also includes power banks, USB chargers, and many other charging and sync cables.

The products are themselves well traveled, covering great distances to reach the points of sale. Take the travel adapters: they are manufactured in Thailand by WorldConnect AG's former parent company Noventa, and once assembled, they usually make their way to Europe by sea.

A trusted relationship

Back in 2015, Dachser Air & Sea Logistics Switzerland began moving the occasional shipment for WorldConnect AG, especially sea freight from Asia to Europe. This yielded positive experiences worth building on: since January 2020, Dachser has also been managing the warehousing and distribution of the goods in Europe directly from the port of Hamburg.

"For WorldConnect AG, we developed an integrated concept that covers a range of logistics services," says Samuel Haller, Country Manager Air & Sea Logistics Dachser Switzerland, who has been looking after this customer since day one. He points out that coordinating intercontinental supply chains with different carriers, locations, and contacts in each country is a complex business.

Profile

Headquartered in Widnau in the Swiss canton of St. Gallen, WorldConnect AG is the global leader in premium travel adapters, known the world over as a specialist in innovative mobile power solutions under the SKROSS brand. skross.com This complexity is also reflected in the sheer number of Dachser locations involved. Dachser Thailand's sea freight export department is responsible for organizing the export of the travel adapters: pickup from the factories in Thailand, customs clearance, and loading onto the ships bound for Europe. "By consolidating the various tasks, we offer the customer efficiency and transparency," says Jesper Larsen, Managing Director Air & Sea Logistics South East Asia at Dachser. "Since Dachser Thailand also coordinates goods pickup, we have a seamless connection to Dachser's European overland transport network." Once they reach Hamburg, Dachser collects the goods and transports them to a warehouse in the port. "It all runs like clockwork," Larsen says.

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Adding value

In the warehouse in Hamburg, Dachser carries out several value-added services. Cartons—either stowed separately or in some cases stacked on industrial pallets—are unloaded and arranged on euro pallets.

Most of the shipments will be transported later via Dachser's overland transport network and by courier, express, and parcel services to more than a thousand SKROSS sales venues throughout Europe. A small proportion of the products will leave Hamburg again by sea, bound for other continents. "Close interaction between our different logistics disciplines enables us to meet the challenges posed by the disruption to the global supply chain," Haller says. He adds that the pandemic in particular is responsible for massive delays in supply chains. Ralf Hansen, General Manager at Dachser in Hamburg, agrees: "The only way to offset these is to dovetail services—that's how we maximize efficiency." Hansen supervises the organization of warehouse services and overland transportation.

Haller and his team are in charge of overall management of Dachser's side of the operation. "Sometimes you have to work with people who you've only ever spoken to on the phone because they're based hundreds of kilometers away. But it's definitely better to know you have someone close by who can solve your problems and, most importantly, you can have personal contact with," says Christian Ernst, Co-CEO of World-Connect AG.

Proximity was yet another argument in WorldConnect AG's decision to enlist Dachser's help to reorganize its logistics. The warehouse's location within the port of Hamburg eliminates

unnecessary journeys and speeds up deliveries. "By moving the warehouse from Austria to Hamburg, we were able to achieve not only considerable cost savings in container delivery but also a noticeable reduction in WorldConnect AG's carbon footprint. Thanks to Dachser's European groupage network and its global air and sea freight networks, we've also improved our transit times," Haller says.

"Now that the products arrive in the warehouse several days sooner than before, they also make it to the customers faster," Hansen adds. This is particularly important when dealing with premium products. "Our goal is to offer our customers a higher standard than for massproduced goods—and that includes the logistics," says Violeta Radisavljevic, Head of Supply Chain at WorldConnect AG. She also notes that the collaboration with Dachser has thus proved to make strategic and ecological sense. Haller adds: "Both companies have set themselves the goal of connecting the world while delivering top quality." They are working together to make this a reality. A. Heintze

A world of difference: There are more than 14 types of plugs and sockets around the world, which differ by shape, pin, and aspects like a third contact for grounding. Adapters remove the boundaries on connections.



Opportunities in logistics

Safely arriving in the right place

For Christina Schloh, working as a dangerous goods safety advisor at Dachser Air & Sea Logistics is a calling—one she has been answering for 22 years. At the age of 14, Christina Schloh already knew exactly where she wanted her professional journey to take her. "Moving goods from A to B has always appealed to me," she says, now age 42. She has fulfilled her dream: as a dangerous goods safety advisor at Dachser, she helps get goods from A to B by plane or ship. And this task requires not only a keen sense of judgement, but also a great deal of specialist knowledge.

Schloh began her career at Dachser 22 years ago in Hamburg, working in sea freight as a trained seaport forwarding agent. She initially looked after major customers, but with a clear path in mind, she soon spoke to her branch manager about her goals: "I wanted to be a dangerous goods safety advisor. I've always known exactly what I want and don't want."

Challenges and responsibility

Schloh was looking for challenges and more responsibility. So, while still working full-time, she attended various training courses on dangerous goods and received her first certification as an advisor in 2005. For a while she handled these duties in addition to her regular work, but the steady increase in dangerous goods transports handled by Dachser made her special expertise increasingly indispensable. That's why she's been working exclusively in her dream area since 2008.



"For me it's not a job; it's a calling. In the field of dangerous goods transport, we've made great strides in recent years. Besides Germany, we look after the EMEA countries (Europe, Middle East, Africa); the Americas (North, Central, and South America); and the Asia Pacific region in the Air & Sea Logistics business field," Schloh says.

The challenges have ballooned as a result; after all, each country has special dangerous goods requirements that have to be observed. Germany is a pioneer when it comes to dangerous goods regulations, but the US, for example, also has a highly complex set of rules. Schloh has the difficult task of coordinating the most precise fulfillment of the specifications with the network of dangerous goods safety advisors in the various countries. Nearly all Dachser country organizations are licensed by the International Air Transport Association (IATA) and must comply with its regulations. This includes having trained personnel for the transport of dangerous goods. "Currently, we have a network of 45 dangerous goods safety advisors. Each country has one to two people who deal with the issue of dangerous goods in air and sea freight, as well as with any domestic regulations," Schloh explains. The Air & Sea colleagues are in contact not only with each other, but also regularly with the dangerous goods organization at Dachser Road Logistics. "After all, an increasing proportion of air and sea freight shipments in the pickup and onward carriage stages are handled by the company's own overland network," Schloh adds.

Every day is exciting and different

What Schloh particularly enjoys about her job is exchanging ideas and networking with others. "My 22-year career speaks for itself. If I weren't satisfied and happy in my job and at Dachser, I'd look for a new challenge," she says. Every working day is exciting and different for her.

From her office at Dachser in her hometown of Hamburg, she is in daily contact with colleagues in Germany and other countries from South Africa to Taiwan, mostly in English. "I specify how to implement the international regulations," she says. "In the process, we look at how we can keep improving and standardizing processes."

Communication is key: Avoiding accidents

In her work, Schloh always relies on communication and collegial cooperation. "I don't want people to be anxious about dangerous goods; I want them to be pleased that we're there to handle them professionally. Our focus is on understanding the complex regulations, implementing them together, and making life easier for employees," she says.

Schloh has made a name for herself at Dachser through her dedication, as well as the key role she's played in the successful development of this special and demanding logistics area at Dachser Air & Sea Logistics.



But the horse-riding enthusiast and mother would rather not hear anything about that. Instead, she's grateful to Dachser for making it possible for her to live her lifelong professional dream every day. "I think it's remarkable that Dachser gave me the chance to grow into this position through advanced training without having taken an academic track when I left high school. This kind of open-minded, big-picture thinking, combined with a great team spirit, just keeps on inspiring me," she says.

That's why she sees herself as nowhere near the end of her professional journey at Dachser: the family-owned company is constantly expanding its air and sea freight network. New countries also always mean new dangerous goods regulations, new tasks, and new challenges—just the right thing for Christina Schloh. L. Becker

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Robotic assistance lightens the load

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Elephantine strength in the warehouse

Despite progress in automation, many jobs still have to be done manually—especially in warehouses. Unloading or repacking goods by hand is a regular occurrence. Dachser is now harnessing innovative technology to safeguard the health of its employees.

Attached to the mighty carbon frame resting on Patric Dandl's hips is a small display. He taps it a couple of times: "It seems that today, I've already repacked two elephants," says the 31-year-old Deputy Shift Leader, who works at Dachser's warehouse in Langenau near Ulm in southern Germany. On peak days, he can lug around up to 8,000 kilograms in a single shift.

Dandl is in fact not a zookeeper, moving massive pachyderms around their enclosures. Instead, he works in a warehouse, where he moves heavy loads with the help of a new kind of exoskeleton. On any given day, employees picking sacks of goods in the food warehouse will together move up to 60 metric tons from one pallet to another not exactly easy on the back. After a while, these 25-kilogram sacks of baking ingredients and mixes start to add up.

"My colleagues who do the lifting don't have a problem with that," says Michael Trunk, Contract Logistics Manager Food Logistics at Dachser's Ulm logistics center, quickly adding: "At least, not the younger ones." But physical complaints can multiply with age. To provide some relief, for a long time Dachser has been investigating how it can support its employees who perform the manual—and often physically demanding—warehouse tasks that are still essential.

This relief comes from state-of-the-art robot technology familiar from science fiction, but used mainly in the healthcare sector. Such external support constructions have been popular in that area for quite some time. They help nursing staff lift and move patients, for example, and support surgeons who have to stand for hours on end in the operating room. In the future, they will also help people suffering from physical impairments or muscle weakness to regain their mobility. And now, they are also being used more and more in industry. \rightarrow



Wearable robots

Following successful tests, Dachser is now using active, Al-supported exoskeletons at certain locations, including the Langenau branch. These wearable robots made by Augsburgbased robotics company German Bionic are donned like a backpack and held in place by straps at the chest and thighs.

Back in 2019, Dachser launched its first pilot projects involving exoskeletons made by other manufacturers. Equipped with mechanical suspension systems, these passive devices simply transfer the forces at play. By way of contrast, the Cray X active exoskeletons currently in use feature battery-powered motors that help the wearer lift and carry heavy objects.

These wearable robots don't exactly turn Dachser employees into superheroes who can then effortlessly lift any object no matter how heavy. Dandl even sounds like a robot when he moves, but that's due to the mini-motors that emit that characteristic soft hum as he moves along the warehouse's highbay racks. Instead, the technology reinforces the movements Dandl makes. If he bends over to pick up a sack from a pallet, the exoskeleton ensures that he doesn't bend his back too much. The device then registers when he begins to straighten up and helps him do so.

Wearers can decide for themselves how much ergonomic support the exoskeleton should provide. "Set to 100 percent, the device will pull me fully upright as soon as it notices that I want to straighten up," DandI says. But he thinks that's going too far. Even though the exoskeleton provides support, Dandl feels like he's controlling it and not the other way around.

Wearing the device doesn't mean the operator's muscles no longer have anything to do. But it does make lifting a 30-kilogram object as easy as lifting a 5-kilogram one, which relieves the burden on spinal discs, the shoulders, and the back muscles. Less pressure on the discs translates into fewer injuries.

A cool technology experience

For Michael Trunk, preventing injuries is a major concern. Since it's becoming harder and harder to interest young people in a warehouse position, the workforce is getting older. "Dachser is using this technology because we want to keep people from overdoing it and prevent workplace accidents. Wearing an exoskeleton means employees are less likely to adopt a potentially harmful posture when lifting heavy objects," he says. What's more, the device has a certain coolness factor. "It's a great way of engaging with young people at career and apprenticeship fairs, and shows them that working in a warehouse also means getting to try out the latest technology," he adds. Exoskeletons automatically make the work much more interesting.

Dandl confirms the practical benefits: "Exoskeletons don't necessarily mean working faster," he says, "but they do provide a level of relief that you really notice by the end of the day."

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Exoskeletons help prevent both unhealthy strain and workplace accidents. That's sustainability.

Michael Trunk, Contract Logistics Manager Food Logistics at Dachser's Ulm logistics center

Matthias Nitz, Deputy Warehouse Manager in Langenau, notices that such experiences are increasing acceptance of the exoskeleton. For his part, Dandl had no trouble getting on board with the new technology. "You get used to wearing an exoskeleton really quickly," he says. The device's tight-fitting backpack means he has to change his sweaty T-shirt a little more often, but he thinks that's a small price to pay. What doesn't have to be changed out during a shift is the device's small battery pack.

Dandl notes one drawback: "The device makes you bulkier. In the beginning, you tend to bump into things more often." Working with the exoskeleton does take some getting used to. To prepare warehouse employees for working with the exoskeleton for several hours at a time, they are currently receiving in-depth training to acclimate them to this motorized support. Representatives from German Bionic are also frequent visitors to the warehouse, providing practical tips and gathering data for further development.

Dachser's Langenau branch is currently using two exoskeletons in its warehouse for picking and repacking pallets. Trunk says that there are also plans to use these devices when unloading containers. Each device is used by multiple employees; each person can store and retrieve their individual settings by entering their PIN. At the end of each shift, the operators can see how many kilograms more they would have carried. "It's usually quite a few elephants," Dandl jokes. **A. Heintze** Active exoskeletons are equipped with battery packs, sensor-based controls, and motors. They provide support for physical labor by generating positive force. This reduces the overall strain of repetitive lifting tasks common to warehouse work, thereby allowing users to devote their energy to more important aspects of the task at hand.



From the laboratory of the future

Emissionsfree flight

Sustainable aviation fuel (SAF) is currently the industry's best hope for achieving a significant reduction in emissions of CO₂ and other greenhouse gases. Now everyone can be part of this promising technology through Book & Claim.

Sustainable aviation fuel (SAF) is a blanket term for climatefriendly aviation kerosene, which can generally be used to power today's aircraft without compromising on performance. Using SAF has the potential to reduce an aircraft's operational net greenhouse gas (GHG) emissions to virtually zero. Alongside efficiency measures, this makes SAF one of the aviation industry's key technologies for achieving the goal of net zero emissions from long-haul flights. While this prize is still a long way off, SAF is already being used on certain routes—and the heat is on to push research and development activities in this area.

What makes SAF fundamentally climate-friendly is the fact that the fuel's production process can be offset against the inevitable GHG emissions from its combustion in jet engines. SAF is manufactured using synthetic or plant-based inputs that themselves have removed carbon dioxide from the atmosphere by way of artificial or biological processes. The amount of CO_2 already removed in this way constitutes the GHG reduction compared to using conventional fossil kerosene. This establishes what's known as a closed carbon loop.

Current and future CO₂ savings depend on an array of technological aspects. For technical reasons, most of the SAFs currently approved for the majority of aircraft are permitted to account for no more than 50 percent in a mix with conventional kerosene. This cuts an aircraft's potential GHG savings in half. Research projects and tests are underway to create better admixture ratios to enable higher proportions of SAF in the next few years.

Fuel from waste

Today, the most commonly used SAFs are based on vegetable oils, waste, and lipids and are converted into hydrocarbons by way of a catalytic reaction with the addition of hydrogen. In terms of their manufacture and basic ingredients, these hydroprocessed esters and fatty acids (HEFA) are similar to hydrogenated vegetable oils (HVO), which can be used as biodiesel in trucks and locomotives. What's relevant from a sustainability point of view is to stick as closely as possible to the specifications for advanced biofuels as laid out in the European Union's Renewable Energy Directive (RED II). This means replacing oils from food crops mainly with waste vegetable oils as well as animal and plant waste. Europe's leading SAF manufacturers like Neste stress that only this kind of biomass should be used. Since residual GHG emissions are an inevitable byproduct of biomass production, HEFA SAF has the potential to reduce GHG emissions by between 50 and 80 percent compared with conventional kerosene, provided that 100 percent SAF usage be permitted. Not factoring in government subsidies, the cost of each metric ton of carbon dioxide equivalent (CO₂e) avoided by using this SAF kerosene would be between EUR 800 and 1,000.

The future is likely to see an upswing in the use of advanced processes such as biomass to liquid (BtL) to turn biomass into SAF. In particular, this would see various waste materials from the wood and forestry industries used to produce aviation kerosene. Here, the GHG savings potential is between 60 and 90 percent. Since these processes are still around 25 percent more expensive than HEFA, their use is rare. But given the amount of SAF that will be required in the future, this production method is credited with considerable potential.

Legal requirements

In addition to biomass, there are also plans to use electricity from renewables to produce SAF. Power to liquid (PtL) is a process that uses electrolysis to convert electricity into hydrogen, which is then mixed with CO_2 to produce hydrocarbon chains with the properties of kerosene. The CO_2 is either sourced from biomass or drawn directly from the atmosphere using technical means. PtL technology leads to a GHG reduction of almost 100 percent during flight. PtL SAF is currently much more expensive than HEFA SAF and is produced only at a few small-scale plants.

EU legislation provides for an incremental increase over the coming years in the proportion of SAFs used when aircraft refuel at European airports. This will up the proportion from today's less than 1 percent to 2 percent by 2025, followed by a series of increases to around 63 percent by 2050. This is stipulated in the draft ReFuelEU Aviation regulation. The proportion of PtL in the SAF portion of admixes should reach around 0.7 percent by 2030, around 8 percent by 2040, and 28 percent by 2050. In other words, as can be seen from the EU's target specifications, SAF won't make up a significant proportion of the fuel used in European aviation until 2040. The plan is to use approaches based on biomass (BtL) alongside those based on electricity (PtL).

Book & Claim approach

Sustainable fuels reduce the CO_2 emissions of aircraft

Several airlines and freight forwarders already offer companies and private individuals wishing to play a part in increasing the proportion of SAF used in aviation the option of booking SAF-powered flights for an extra charge. For economic and organizational reasons, SAF is not always used in the specific aircraft the freight or passenger flies on. Instead, the purchase of SAF certificates compels the airline or airport to use SAF in its refueling system. A recognized verification procedure is in place to ensure that the GHG-saving effect actually takes place and is credited to only one airline and one customer. This Book & Claim approach makes it possible for anyone to make a valuable contribution to technological change and climate action in aviation. In terms of its basic principle, this approach, which is also known as "insetting," is comparable to the market for renewable electricity and the trade in proofs of origin. Dachser, too, will be taking the Book & Claim approach when it launches its first SAF projects together with customers in 2023.

Andre Kranke, Head of Corporate Research & Development The "From the laboratory of the future" feature presents findings from the Corporate Research & Development Division, which works in close collaboration with various departments and branches, as well as the Dachser Enterprise Lab at Fraunhofer IML and other research and technology partners.

Network expertise

Pictured, from left: Burkhard Eling (Dachser CEO), Markus Lechner (General Manager of kasasi), Stefan Hohm (Dachser CDO)



Pooling digital power

In acquiring the majority share in software provider kasasi GmbH, Dachser has strengthened its expertise in telematics, connectivity, artificial intelligence (AI), and the internet of things (IoT). Continuing a success story.

kasasi was founded in 2009, and since then, its Kempten location has been developing innovative software products that optimize and bring transparency to transport processes for road, rail, and sea. "As a highly innovative provider of connectivity and IoT applications, kasasi perfectly augments our own digital competences," says Stefan Hohm, Chief Development Officer (CDO) and member of the Dachser Executive Board. "kasasi's platform combines telematics data from our more than 8,500 swap bodies and 5,000 trailers with shipment and planning data from our core transport management system, DOMINO. The intelligent confluence and analysis of this data opens up entirely new possibilities for planning transports, calculating arrival times, and even tracing and managing shipments."

The success story continues

"With Dachser as the majority shareholder, we can keep our success story going and focus all our attention on developing pioneering transport and logistics software," says kasasi's Markus Lechner, who worked at Dachser for many years prior to founding the start-up. "With the right digital technologies, we can raise efficiency even more, integrate our customers closely into our processes, and transport more goods with the existing load capacity. Increasing transparency improves planning and shortens the time it takes to respond to any disruptions in supply chains," says Dachser CEO Burkhard Eling, emphasizing how vitally important digitalization is for Dachser and its customers.

Three focus locations for electromobility

At its three e-mobility locations in Freiburg, Hamburg, and Malsch near Karlsruhe, Dachser is investigating and testing zero-emission technologies as well as intelligent power and load management. The long-term objectives are to increase the number of zero-emission vehicles throughout Dachser's European network and to achieve net zero greenhouse gas emissions.

"We expect road freight transport in the European Union to gradually switch to trucks with emission-free powertrains in the coming years. These will be battery-electric or hydrogen fuel-cell trucks, depending on the use case. With our current research and innovation activities, we're already preparing for this far-reaching transformation of the transport and logistics sector," says Alexander Tonn, COO Road Logistics at Dachser. "Until then, however, there are still a number of challenges to overcome, especially as regards vehicle range, the availability of fast charging infrastructure on highways, and the provision of the corresponding power infrastructure by the utilities at our locations."



Sustainable growth in Poland

Dachser is expanding its branch network in Poland. Early in October, a new branch in Toruń in the north of Poland went into operation. The facility has 2,500 m² of floor space and consists of a two-story office building with a floor area of about 482 m², a terminal, and a class A warehouse. It meets high sustainability criteria, which is why it has been awarded the BREEAM certificate, an international evaluation system for the ecological and sociocultural aspects of buildings, with a "very good" rating.





New Managing Director European Logistics Germany

As the new Managing Director European Logistics Germany starting January 1, 2023, Andreas Fritsch will oversee and further expand Dachser's transport and storage business for industrial goods in Germany.

The experienced branch manager of the Ostwestfalen-Lippe logistics center in Bad Salzuflen near Bielefeld is taking over from COO Road Logistics Alexander Tonn. Tonn has been leading the European Logistics business line since 2017, performing a dual role since his appointment to the Dachser Executive Board in early 2021.

An experienced General Manager, Fritsch has had an exemplary career at Dachser spanning more than four decades and almost every career level.

As Managing Director European Logistics Germany, Fritsch will set out to continue the long-standing, sustainable growth of Dachser's European Logistics business line on the German market. He is also committed to anchoring and promoting central issues such as digitalization, climate protection, and the recruitment of qualified personnel in the business unit.

Expanded capacity in Austria

Dachser has invested EUR 4.3 million in the expansion of its warehouse in Hörsching near Linz. The expanded storage and logistics area has $5,640 \text{ m}^2$ of floor space and offers 10,500 new pallet spaces in addition to the existing 20,000. It went into operation in November 2022.



A Hungarian-European speciality

Liegl & Dachser is one of Hungary's leading logistics companies, and it is playing an increasingly important role in both domestic and European food logistics. In times of economic and global political complexity, success in transporting and storing chilled and non-temperature-controlled goods hinges on providing quality and reliability.

It was love at first bite. In Hungary, this culinary play on words can be expressed in appetizing figures: according to the most recent market surveys, revenue from food is set to rise from EUR 13.31 billion in 2022 to EUR 18.34 billion by 2027. This would represent annual growth of 6.62 percent. \rightarrow

Traditional beauty: The vast market hall in Budapest Managing such increases calls for particularly high-performing food logistics. Established in Hungary as a joint venture in 1999, Liegl & Dachser has earned a reputation as a first-rate logistics provider thanks to its portfolio of transport and logistics solutions. In 2008, the company set up its own Food Logistics unit for the Hungarian market. "From day one, Dachser's proven standards in performance, quality, and IT helped us in Hungary to acquire leading European food producers and retailers as customers for our logistics solutions," says Alfred Miller, Managing Director Dachser Food Logistics. Over the past 14 years, Liegl & Dachser has developed a wide variety of food logistics solutions to meet the individual requirements of domestic and international food producers.

Focusing on fresh

Liegl & Dachser's food logistics business is currently focused on meat and dairy products as well as on upstream food products in the ambient segment. In 2021, the company moved food shipments weighing roughly 120,000 metric tons for its domestic and international customers. This involved the distribution center in Budapest, two further locations for distribution and procurement transports, and a multiuser warehouse with 33,800 m² of storage space and 32,000 pallet spaces.

In addition to warehousing and transport, Liegl & Dachser also offers value-added services including co-packing and labeling. For one customer in the animal feed business, the dovetailing with these services starts right after the manufacturing process, as machines help put the manufactured goods into primary packaging. Further options include customs clearance and dealing with Hungary's Electronic Road Freight Control System (EKAER). These services are especially important when it comes to Europe-wide imports and exports involving the European Food Network, which connects Liegl & Dachser to no fewer than 33 countries. The daily connections from Germany and other European markets and the timetabled transports that leave Hungary are managed by Dachser's Neufahrn branch near Munich.

"Our logistics facility in Budapest is proving instrumental in generating further growth in the Hungarian and European markets," says Tamás Horváth, Branch Manager Liegl & Dachser Food Logistics Budapest. This location, which opened in 2017, is connected directly to the greater Budapest area and the European transport network by the M0 highway. Distribution in Hungary is completed within 24 hours, and products arrive at grocery stores from Budapest in one step. "Due to the extremely practical location and the extra operations and storage areas, we have the ideal conditions for handling and warehousing temperature-controlled and non-temperature-controlled food. This means we can offer our customers in food production, retail, and export first-class quality and top service," Horváth says. He makes special note of the comprehensive tracking and tracing as well as the optical archive of proof-of-delivery documents for the customer.



Efficiency in dynamic markets

Horváth also points out that quality and service become even more important when market conditions are tough. The milk market is currently experiencing significant price increases, he says, but these are not as drastic in Hungary as in international markets. "People are starting to regard dairy products as a luxury," he says, adding that this makes it even more important to have logistics standards in place to offer customers as much reliability and efficiency as possible.

"We strive for continuous development both in administrative and in hands-on tasks," he says. These efforts are based on well-established processes that comply with International Featured Standards (IFS) Higher Level, HACCP guidelines, and ISO 9001 certifications that are subject to regular audits and resultant readjustments.

"Our strength lies in uniform process standards that can be tailored to meet individual customer requirements," Miller says. Dachser's own IT systems for transport and warehousing in conjunction with Dachser eLogistics—the online portal for managing logistics tasks—play just as big a role here as innovative mobile tools and handhelds that support the employees who handle cargo, work in the warehouses, and drive the trucks.

Miller also says that Dachser's vast operational experience is helping increase efficiency as an answer to rising price pressures. "Our tailored consolidation solutions, for example, reduce loading bay traffic and enable incoming goods to be processed faster," Miller says. "Documented processes and automated temperature documentation coupled with stateof-the-art cooling technology, batch tracking, and certified quality management translate into extensive transparency and the best possible food safety. That is and will remain crucial to maintaining an edge in the growth market that is food logistics." M. Gelink

So kids can be kids

Relaxing, playing together, laughing: this is not a given for many children in Ukraine, who have experienced severe psychological and physical stress from the war and as a result of having to flee their homes. Dachser and the children's charity terre des hommes are providing support to specialists in child psychology and trauma therapy so they can help those affected with playful exercises to stabilize their nerves and emotions. In times of war, this help must be given at many different places, and constant attacks mean the risks are always high. But it is precisely these little moments of happiness that give rise to great hopes.



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- High degree of expertise in dangerous goods transportation and the storage of hazardous substances
- Cooperation with the German Chemical Industry Association &^{vcl} and other associations in Europe