



Freight Connections

THE CUSTOMER MAGAZINE OF DHL FREIGHT

E-HIGHWAY
High voltage trucking

RALLEY DAKAR
On the fast track

DIGITAL DYNAMICS
**Eight trends that
change all industries**



INTERMODAL TRANSPORTATION

STAYING ON THE GROUND

Overland to Asia – new routes for overseas trade

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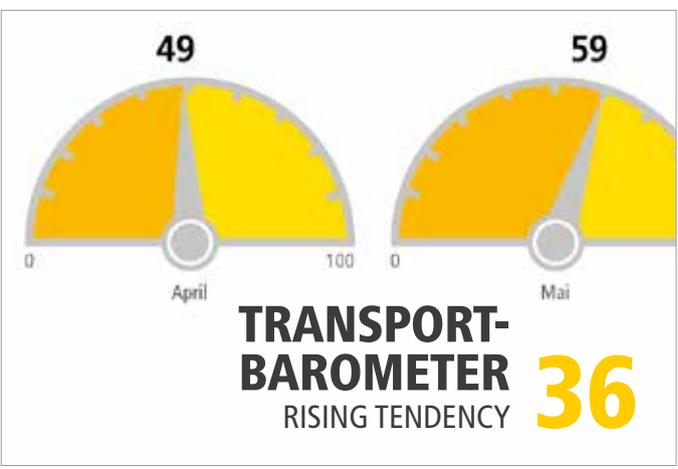
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GOOD CHANCES IN SOUTH-WEST EUROPE

Even a complicated market provides many opportunities for logistics companies, customer-oriented thinking and acting. Sales & Marketing Director Laura Gomez explains the spanish market.



Laura Gomez
Sales & Marketing Director
DHL Freight Iberia



Without wanting to exaggerate, south-west Europe has for a longer period of time been a problem child for the European economy. And no miracles are to be expected here in the future either. For example, prognoses see Spain's growth rate at 2.3 per cent in the year 2017, which is below the expectations of the government. To get ahead in such a market environment is a challenge, but also an incentive for new ideas and methods.

Focusing on customers

In order to continue our success, we are focusing even more on our customers than previously. In this context the two most important things are: To deliver consignments as quickly as possible and to keep all participants,

including senders as well as consignees, constantly up to date about all important data. This applies for the delivery time as well as important events on route, such as delays or in extreme cases even breakdowns and failures. Both points – speed and information – are always main demands in our customer satisfaction analyses. We like to be judged by both, as we have a successful track record in both areas. And that is not least due to our highly qualified staff: 85 percent of staff at DHL Iberia are already recognised "Certified Freight Specialists", the remaining 15 percent will follow suit.

Opportunities in northern Africa

Beyond that, the market on the Iberian peninsula also provides great opportunities across borders, primarily in northern Africa, due to its geographical location on the south-western tip of Europe. This is where the cargo routes to Morocco are particularly important. In recent years, many of our customers have had largely similar problems with deliveries there. These were caused, among other things, by customs, the connecting routes, the so-called last mile and, last but not least, transparency issues. We have taken on all of these concerns, significantly intensified cooperation – in particular with Moroccan customs and other partners on location – and ultimately developed a highly reliable solution. Our DHL Freight EuroConnect Route from Barcelona to Casablanca provides two weekly connections between the cities. Duration: 48 hours. And with our Active Tracing Monitor customers are able to receive information on their consignment at all times. To sum it up, DHL Freight Iberia thus offers the most reliable service to northern Africa.

And we plan to further expand this success in 2017.

I expect that our own customs clearance for all Spanish external borders – not only to Africa – will be up and running soon, which will significantly shorten our journey times. I am confident that we will be able to set up a third weekly departure to Casablanca and to extend our connections in the direction of northern Africa to Algeria and Tunisia too. All in the interests of our customers.

Pharmaceutical Competence Center

Another important measure carried out with the aim of providing maximum guarantees and quality for our customers, is the creation of the pharmaceutical Competence Center within the facilities of DHL Freight Coslada.

It consists of three areas: an anteroom with 170 m² floor space, one storage room with 220 m² tempered to 15-25° Celsius and one with 110 m² cooled down to 2-8° Celsius. These are dedicated to the FarmaFreight service, specializing in the controlled transport of temperature-sensitive pharmaceutical and biomedical products. I would also like to point out the specific area for the handling of psychotropic drugs, which is managed with special vigilance.

The facilities have quality management systems and are monitored with calibrated probes and thermal mapping. The temperature monitoring is permanent and restricted, and 24-hour supervision by closed circuit cameras is provided. Furthermore, the Competence Center has received a certificate of compliance in accordance with GDP for these temperature controlled facilities dedicated to the pharmaceutical sector.

The transport of pharmaceutical products requires great effort in order to adapt to the needs of our customers. We therefore have to provide the highest degree of reliability.

That said, we will continue to put our customers needs beyond everything else, staying ahead of the game as first choice in south-west european logistics.

POLLUTERS PAY MORE

Austria: The additional toll costs for the transport industry will remain manageable.



Two steps forward, one step back and then three steps sideways? For a long time Austria has been arguing about new truck toll regulations. Businesses fear that the burden will be too big, while political parties – depending on their position – believe road transport is being privileged, or that there are not enough or too many ecological aspects. But now things have calmed down – at least for the transportation industry. The so-called major adjustment is off the table. This envisaged a recalculation according to vehicle category, which would have led to an increase in costs of four to eight percent.

But now everything will remain the way it is in 2016. Well, almost. There will be an increase in the toll fee by one percentage point – compensation for inflation, as it were. From 2017 to 2020 a scaled-down toll calculation version is to apply. It consists of a base rate as well as surcharges for air and noise pollution. The basic rate depends on the number of axles and roughly corresponds to the average toll from the year 2015.

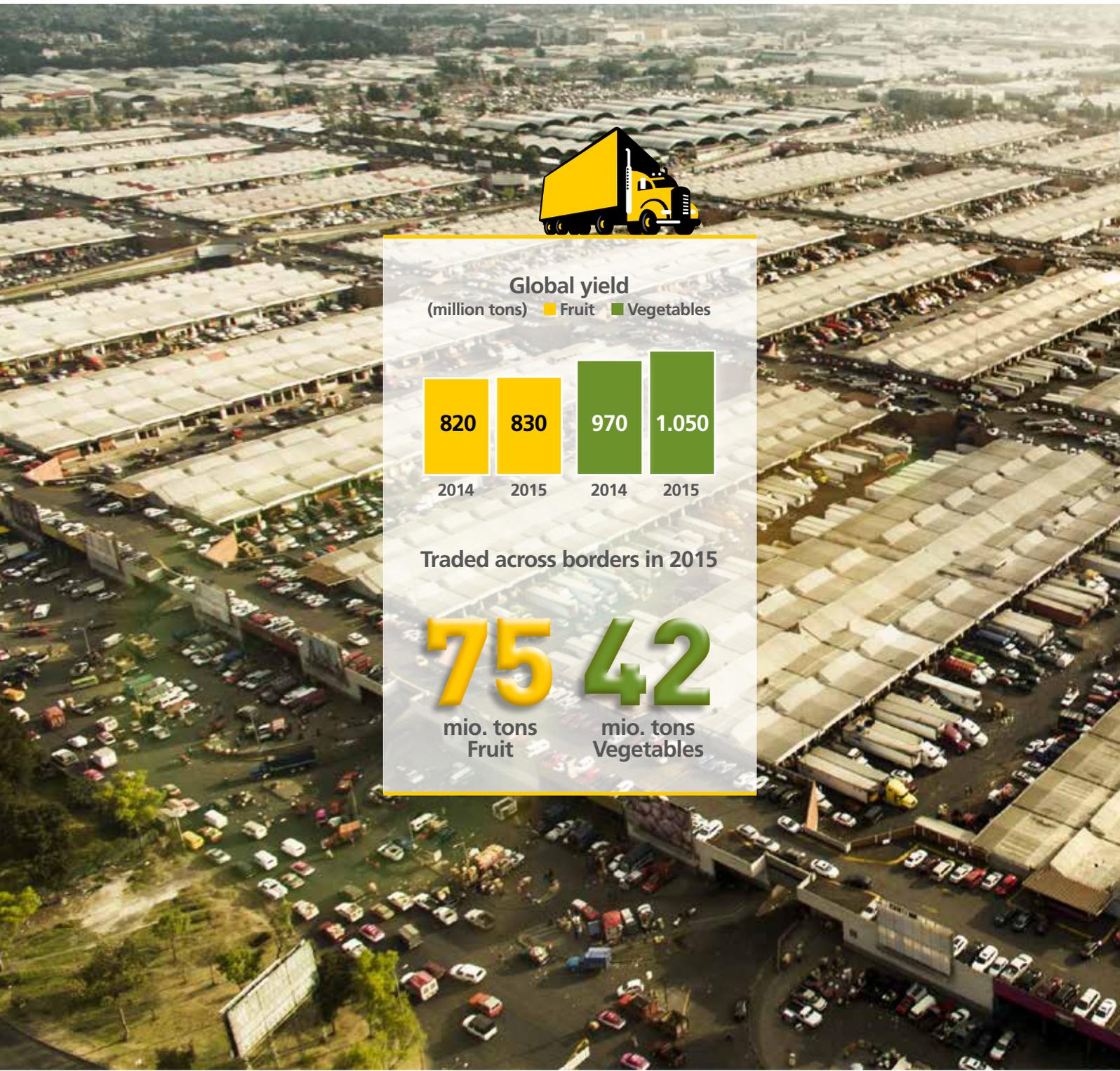
The logistics industry is therefore generally rather relaxed when it comes to the new toll structure: “Thanks to our modern vehicle fleet with 40 percent Euro-6 trucks, we are well positioned for the future. We understand the idea behind the toll structure, as environmental protection is an integral part of our corporate strategy”, explains Pawel Niziolek, Marketing & Sales Manager DHL Freight Austria & Slovenia.

TORSTEN ARNOLD

Additional

Website of the Austrian Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft (ASFINAG)



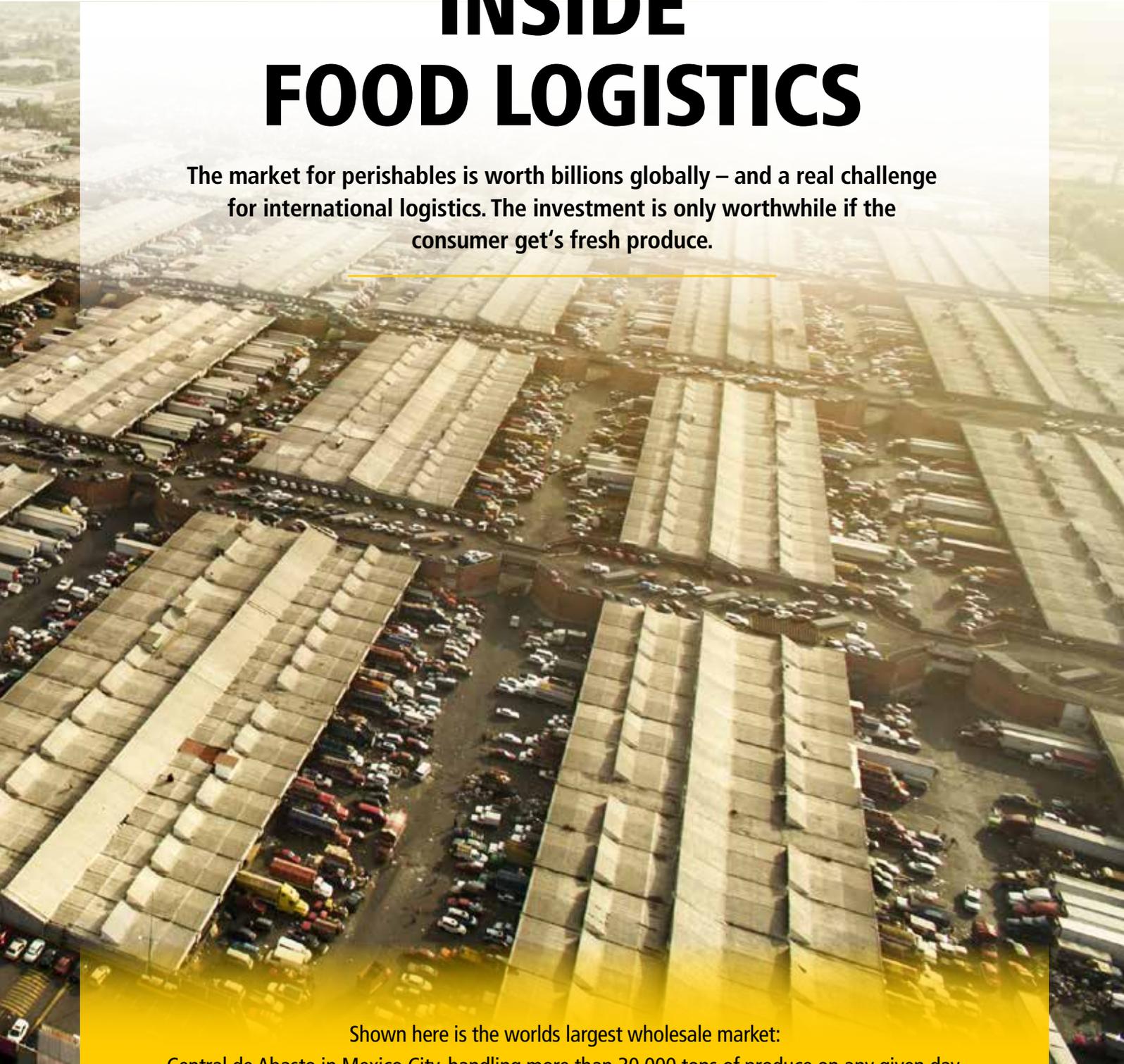


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STATISTIC OF THE MONTH

INSIDE FOOD LOGISTICS

The market for perishables is worth billions globally – and a real challenge for international logistics. The investment is only worthwhile if the consumer get's fresh produce.



Shown here is the worlds largest wholesale market:
Central de Abasto in Mexico City, handling more than 30,000 tons of produce on any given day.



E-HIGHWAY

HIGH VOLTAGE TRUCKING

Sweden has opened the world's first e-highway, where trucks can drive with electricity from overhead cables.

Trains and trams are often powered by overhead lines. That's rather normal. In some cities – especially in China and Russia – busses are also powered the same way. So why shouldn't it work with trucks?

In two pilot projects in Sweden and California, Siemens is now testing electrified road transport. In Sweden the first e-highway was opened on a two-kilometre section

of the E16 motorway. This is where two diesel hybrid vehicles by the vehicle manufacturer Scania are used. They have been adjusted in collaboration with Siemens to operate under the overhead line. With this two-year test the Swedish transport authority Trafikverket and the region of Gävleborg now want to gather information on whether the Siemens e-highway system is suitable for

Siemens eHighway

Electrified freight transport – a contribution to a transport sector independent of fossil fuels

20,000€

of fuel savings can be achieved by a German 40-ton truck driving 100,000 km on the eHighway (at 2014 prices)

6,000,000t

of CO₂ savings per year if 30% of truck traffic on German highways is electrified and supplied with renewables

2x

Increase in efficiency as compared to conventional combustion engines, thus energy consumption is cut by half

>80%

efficiency level with overhead contact lines

The hybrid drive technology in the truck ensures flexibility when overtaking or where there is no overhead contact line available

Braking energy can be recovered

90 km/h

is the maximum driving speed during which the pantograph can connect or disconnect to the overhead wire

0

local air pollution caused by electric drive

The key innovation is the intelligent pantograph

Demonstration of eHighway on public road

The world's first public road project with electrified highway trucks is conducted in Sweden

2030

the year, by which Swedish transport sector shall be fossil fuel independent. To evaluate realistic solutions for sustainable road transport, the Swedish authorities funded this demonstration project.

2 year

period, during which Siemens, in cooperation with truck manufacturer Scania, will demonstrate hybrid trucks with operations under a catenary system

2 km

of the highway ETR has been equipped with eHighway infrastructure without any dispensations from the existing rules and regulations

75,000€

of fuel savings can be achieved by a Swedish 60-ton truck driving 200,000 km on the eHighway (at 2014 prices)

75%

reduction in fuel costs is possible with electrified freight transport (Source: Grantmig 2010)

future permanent commercial use and further expansion. Sweden has set itself the ambitious goal of managing without any fossil fuels in the transport sector by 2030.

In Carson, California, a similar project is currently ongoing in cooperation with the regional authority for monitoring air quality and the vehicle manufacturer Volvo.

Only half as much energy needed

The principle: The hybrid trucks are equipped with sensors. They can automatically attach to overhead lines and then drive literally without emissions.

The core element of the system is an intelligent pantograph in combination with a hybrid drive system. A sensor system enables the pantograph to establish contact with the overhead contact line or to interrupt it at speeds of up to 90 km/h. Accordingly equipped trucks are supplied with electricity from overhead wires while driving, thus providing efficient and locally emission-free transport. On roads without overhead lines a hybrid motor drives the truck.

The advantages: Energy consumption is halved. Air pollution and CO₂ emissions can be reduced significantly.

ANNE GOERGEN

INTERVIEW: GERMAN TRAFFIC FORUM

FUTURE MEANS UNITY

The European logistics industry faces major challenges that can be resolved only by working together.

Dr. Ulrich Nußbaum, President of the Deutsches Verkehrsforum e.V., explains his view.

The German federal transport infrastructure plan, European infrastructure problems, digitalization and environmental policy – these are all issues that are plaguing Germany's only economic cross-industry cleanup in the mobility sector. The President of the German Transport Forum, Dr. Ulrich Nußbaum, in an interview with DHL Freight Connections.

The discussions concerning the federal transport infrastructure plan are intense in the federal states of Germany, but also particularly fierce on a regional level. How do you see the federal infrastructure plan?

Dr. Ulrich Nußbaum: Firstly, I would like to stress that the Federal Traffic Infrastructure Plan (FTIP) focuses on the right issues. Preservation comes before new construction, and the elimination of bottlenecks is key. We are thus moving away from the "wish list mentality" of the previous FTIP. What is now important is that projects of nationwide significance remain in focus. But only with a continuous and long-term budget that is assigned for several years for specific projects will the federal investment ramp-up have an effect. Means that are not used up budget must be available in the following year and should not be allowed to flow into subordinate projects through the back door.

Logistics requires infrastructure, but space is tight – particularly in Europe. What concepts do you have for the transport of the future?

Nußbaum: When it comes to freight transport, we need a consistent trafficable network of roads, railways and waterways for the main traffic arteries in Europe. And we should not further restrict the operating hours of the air cargo hubs. The EU Member States are thus obliged to extend and maintain the trans-European transport networks. In particular in the area of rail transport, it must be possible to drive from one country to another without having to change the entire locomotive or its technology. What is also needed is a "one-stop shop" for the heavy goods vehicle toll: a single device and a single form of billing. Furthermore, we must also strengthen combined transport, and digitally upgrade roads.

Everyone is talking about catchphrases such as Industry 4.0 and the Internet of Things – what are the implications of the increasing digitalization of the economy on the traffic of the future?

Nußbaum: Digitalisation is a "game changer" – it will fundamentally change the mobility sector and in particular the logistics industry: Ports and airports, for example, with companies such as Dakosy, are pioneers in the seamless information chain that by now accompanies physical transport. All port or airport participants network with each other and receive the necessary data – even across businesses and transport networks. Digitalisation will go a further step forward through the automation of the me-



Dr. Ulrich Nußbaum,
President of the Deutsches
Verkehrsforum e.V.

ans of transport. The developments of Logistics 4.0 provide new opportunities, business fields, added value for users, more safety and sustainability. But they also provide new challenges for the German transport industry and transport politics, for example in the areas of data protection, liability law or autonomous vehicles.

The transport sector must also play its part to stop climate change. How, in your opinion, will that work?

Nußbaum: Several different areas have to be addressed: aerodynamic changes to the vehicle and trailer, automated driving, more combined transport, development of new drive systems and fuels, and of course the networking and digitalization of vehicles and infrastructure. For example: With “forecasting” logistics systems can predict the demand at fast food restaurants on the basis of weather and event data and thus automatically initiate the delivery of exactly the right amount of hamburgers and fries. In that way unladen journeys can be avoided.

How do you see the impact of increasing global political instability on the German and European transport sector?

Nußbaum: Within Europe and in Germany we have for years had high standards for the safe transport of goods. With approaches such as the “known sender”, the logistics sector is a pioneer in the area of safety regimes. It is im-

portant that politics, authorities and industry continue to work closely together in order to keep the flow of goods going. Security checks are important. However, they should not be across the board, but take the form of spot checks on the basis of transmitted logistics data. Unfortunately this is not always the case today.

Deutsches Verkehrsforum e.V.

The slogan of Deutsches Verkehrsforum is “Mobility for Germany”. The association advocates an efficient, customer-oriented and sustainable integrated transport system across transportation means. It includes companies and associations, producers, service providers, consultants and user representatives. The approximately 170 members represent the entire value creation chain in the mobility sector. Another goal is the connection of the transport industry with other industries such as energy, construction, telecommunications, financial services and consulting.

Additional

Website of Deutsches Verkehrsforum e.V.





WAR FOR TALENTS

ATTRACTIVE OFFERS

Sustainable human resources policy enables small and medium sized logistics companies to gain ground in the contest for new employees.

The lack of young talent is one of the major challenges in the logistics industry. Currently and in the future too. The volumes of goods transportation are steadily rising and vehicle technology is constantly being developed – the demand for qualified professional drivers is therefore correspondingly high. Especially small and medium enterprises (SMEs) in the logistics sector are finding it difficult to hire suitable personnel, as the big players in the industry can often offer attractive employee benefits.

So does that mean that SMEs have little chance of finding the right drivers and keeping them in the long

term? Not necessarily – at least according to a research project by the University of Fulda, Germany. The core idea is as follows: SMEs can significantly improve their position in the “war for talent” through socially sustainable personnel policy. The German university surveyed nearly 130 German based companies in the logistics industry for the study.

Social sustainability becoming more important

Poor employment conditions make it particularly difficult to attract and retain professional drivers. Collective

agreements are therefore regarded as an important parameter for the compliance with minimum standards. The sample showed that 52.7 percent (i.e. more than half of SMEs) are covered by collective agreements. When asked which types of collective agreement apply, almost three quarters are subject to a covering agreement or company wage agreement. A little less than half of the companies are bound by collective wage agreements. The vast majority of professional drivers are employed on a permanent basis. Almost all surveyed companies also stated that they do not fall back on contract workers when it comes to filling vacancies for professional drivers.

Vocational training is a key focus of personnel development. That is why questions about the future-oriented

education and training of workers were also asked: 62 percent of companies carry out vocational training and further training planning with their driver personnel. For employees this is an important criterion when choosing an employer.

When it comes to the major topic of social sustainability, the study shows the following results: Companies have become aware of the importance of social sustainability and in particular the social responsibility towards employees for the recruitment and retention of professionals. However, the importance of voluntary CSR measures to the advantage of their employees that go over and beyond the mandatory measures is not sufficiently recognized by many businesses. SONJA TERBRÜGGEN

How even a small logistics company can retain professional drivers:

Current situation	Potential for optimisation
Partially fixed-term contracts , employment on a contract basis, marginal employment, involuntary contract work	(Full-time) work contracts subject to social security contributions that provide job security
Work time models often aligned solely with company interests; partly on-call work	Granting of more self-determination by drivers in relation to working time [flexitime, (life) working time accounts, age-appropriate working time models], no on-call work, provision of job-sharing offers particularly for (female) drivers with family
Partially not bound by or based on a collective wage agreement , only partially pay for overtime, night work and encumbrances	Orientation on collective wage agreements, appropriate compensation for overtime and night work, hardship allowances, additional remuneration for the support of trainees, volunteer training in free time and health-promoting personal provision
Mostly small and rigid offer of company benefits and facilities that are not always up-to-date, and lack of health management	Life phase-oriented and contemporary alignment of employee benefits, leisure and fitness offers, regular health checks, health and nutrition advice, support with childcare and/or care of relatives, occupational pensions
Qualification measures mostly limited to the necessary (required by law) without future planning; further training partly according to the professional driver qualification law without assumption of costs and/or leave of absence	Development of reliable training plans that are adapted regularly, implementation of age-appropriate skills training, financial and/or work time support for the training according to professional driver qualification law
Partial application of an authoritarian leadership style , more incident-based than regular staff appraisals, relatively unincisive feedback culture, rarely surveys on job satisfaction among employees	Staff leadership dialogue, granting of freedom of action, regular staff meetings and information sessions, target agreement and achievement discussions, development and remuneration discussions, assessment of superiors by employees, formulation of guiding principles, employee surveys on job satisfaction

PLATOONING

PLEASE MOVE UP!

Safer, more efficient and even fuel-saving – these are the benefits promised by platooning technology.

However, whether we will soon see rows of trucks driving closely behind each other on motorways is not only a question of technology, but especially of politics.



Driving closely together with only a small gap between each other while using the slipstream of the man in front – this is a rather normal thing at the Tour de France. Cyclists know all about the advantages of riding in a pack and generally ride large parts of the Tour de France stages together in a group – with the exception of those who actually break away. The same tactic will in future also be made use of by trucks – only with electronic support.

Platooning is the name given to the system of tightly packed truck convoys. Trucks on motorways ride within a distance of ten meters from each other. But the technology is not new: As part of the European research project “Safe Road Trains for the Environment”, known as “Sartre”, techniques for driving in a convoy led by a truck have been developed for several years. Initial tests on the road were carried out in 2012 in Spain.

Leading vehicle sets the tone

In order to avoid accidents during such close tailgating, the trucks used in platooning are equipped with GPS, radar and WiFi as well as assistance systems for autonomous driving. The systems communicate with each other while driving. The first truck is the lead vehicle – it determines the direction of travel and speed. If it goes around an obstacle, such as a construction site, the others follow.

At the same time, this narrow single-file driving creates space. Three trucks with platooning technology together require 80 meters of motorway. And that is merely half of what normal trucks require when taking into account the minimum mandatory distances between them. The small distance between the vehicles reduces drag. That means that platooning can reduce fuel consumption by up to ten percent. But the lead vehicle also benefits since air swirl no longer develops at the rear and slows down the vehicle. If another car squeezes into the convoy, the vehicle in front of it and behind it automatically assume a safe distance.

And platooning also has advantages in terms of safety: A computer-controlled truck responds far faster than any human could. For example, the platooning system that Daimler is currently developing sends brake signals to the following vehicles within less than 0.1 seconds. Truck drivers generally require a response time of 1.4 seconds – if they are very good.

Political hurdles

In order for the system to work properly, two essential conditions must be met: First, the associated vehicles need similar engine power. Second, the vehicle with the highest total mass should lead the convoy, so that the convoy



can stay together on ascents.

From a technical point of view platooning will be possible throughout Europe by 2020, say truck manufacturers. But feasibility alone is not the only hurdle that has to be taken on the road to everyday use of such truck convoys. Because, the legal framework currently exists neither at a national nor at a European level. Politics will have to set the course and, for example, adjust traffic regulations across borders. Furthermore, the general public may also see platoons on motorways as an obstacle or threat rather than a sign of progress. According to a survey by the Deutsche Verkehrs-Zeitung (DVZ), nearly 45 percent of logistics professionals expect that people would rather accept long trucks than truck convoys on motorways. MICHAEL WAYAND

PLATOONING

HOW IT WORKS









Scania is prepared to take a major step towards the future.

1. BOOK A SPOT

You book a spot in a platoon ahead of time, then a back-office system tells you where and when to meet.

2. ENTER & INTERMIX

Limiting platoons to 10 vehicles so that platoons and ordinary traffic could intermix, without having to worry about blocked freeway exits.

3. STEERING OPTIONS

Distances from one vehicle to the next are computer-controlled, but steering can be either manual or automatic.

4. DISTANCE

The trucks will then drive with a gap of merely 0.5 seconds or 10 metres.

There is a limit how close it is actually worth it to cruise. The optimum space: six metres.

4. WIRELESS

Present systems do not support distances this short and Scania will therefore employ wireless communications between platooning trucks.

5. CONTROL & EXIT

When they are ready to leave, the driver takes back control and exits the train.



Additional

How platooning works



GOTTHARD BASE TUNNEL

STRAIGHT THROUGH THE MIDDLE

The Gotthard base tunnel is driving intermodal transport. 30 days after its official opening, one thing is certain: The Swiss have kept to their schedule and will send the first scheduled freight trains through the tunnel by the end of 2016.

It is both a legend and a real lifeline: Since the 13th century the Gotthard axis has been one of the main links between Northern and Southern Europe. People have been transporting freight across the Alps along that route ever since. The new Gotthard base tunnel is a further important milestone in Alpine transit. After 17 years of construction, the longest rail tunnel in the world was opened on June 1, 2016. It runs from Erstfeld in the Swiss canton of Uri to Bodio in Ticino. The 57 km route will be opened for freight traffic by the end of 2016.

This will make it possible for the first time to pass the Gotthard massif virtually without any notable gradient.

The 3,000 planned tests are currently still underway in the tunnel. Among other things, the Swiss AlpTransit Gotthard AG (ATG) is testing the use of 1,500m long freight trains. The longest trains currently used in real conditions are 850 meters long. When the Gotthard base tunnel is officially opened for traffic in 2017, an expected 260 freight trains and 64 passenger trains will use the tunnel every day.

THE GOTTHARD BASE TUNNEL: TRANSITING THE ALPS AT SPEED

	Old railway	New base tunnel
Freight trains per day 	180	260
Locomotives per train 	3	1
Gradient (in m) 	580	90

Sources: ATG, Deutsche Bahn, photo: iStock/flypardon

Better north-south connection

In particular, intermodal freight transport will stand to gain through the Gotthard base tunnel. Roughly 9,000 trains pass through the Gotthard every year. Between Germany and Italy alone, about 15 million tons of goods are transported across the Alps annually. "The north-south corridor is a very important intermodal route. And that also applies for DHL Freight," says Thomas Kowitzki, Head of Multimodal DHL Freight. The intermodal connections of DHL Freight from Italy to Germany, Great Britain and Scandinavia currently use the old Gotthard railway line. "We see the opening of the Gotthard base tunnel as an important milestone for the optimization of intermodal transport infrastructure in Europe – which will benefit customers, operators and the environment," explains Kowitzki.

The advantages speak for themselves: longer trains and a shorter distance without any significant gradients – meaning that fewer locomotives, less time and thus less energy are required. On the old route the trains have to overcome a difference in elevation of 680 meters – which means that three locomotives are required. By contrast, the new base tunnel rises by only 90 meters, meaning that only one locomotive is required as a traction engine.

Southern ports becoming more attractive

Transalpine freight will surely benefit. The Gotthard base tunnel is also an important section of the Rotterdam-Genoa freight corridor. It will make a significant

contribution towards realigning European freight streams. Until now, the northern ports of Rotterdam or Hamburg have played a dominant role for Chinese imports, for example. But that could change with the Gotthard base tunnel, especially when it comes to goods with the target regions of Bavaria and Baden-Württemberg. This is where southern ports such as La Spezia, Genoa and Savona will become more attractive. Accordingly, they are also looking to expand their proportion of railway transport.

But this is still a long way off and all part of a long-term development. In order to enable rapid transport from Rotterdam to Genoa, the connections in the north – i.e. the expansion of the Rhine valley line from Karlsruhe to Basel – and the Ceneri base tunnel have to be completed. The Ceneri tunnel is under construction and scheduled to open in 2020. The 182 kilometer Rhine valley line expansion between Karlsruhe and Basel is expected to be completed by 2035.

STEPHANIE LEUWER

Additional

More on intermodal and multimodal transport at DHL



8 TRENDS THAT CHANGE ALL INDUSTRIES

DIGITAL DYNAMICS



Stefan Heilmann,
Managing Director and Head of
IEG Internet Desk, IEG

Stefan Heilmann, Managing Director at IEG – Investment Banking Group shows eight trends, that will push the digitalization the most.

1. Triple Play

Triple Play entails the interplay of software, hardware and services. Achieving the perfect combination creates an ecosystem that benefits customers and company. CLAAS for example has created a bi-directional path to their customers and services. 40 years ago, CLAAS offered exclusively agricultural machinery with an after-sale service. These days, CLAAS is a pioneer for digitization in its own industry by becoming a software, satellite and telemetric business.

2. Mobile Only

Mobile is the predominant medium for people to handle their personal as well as their professional life. An evaluation of the 19 available DHL apps shows, that about 1/3 of these are purely used for marketing reasons (i.e. sponsorships). The other 2/3 are covering various aspects of the DHL service. The smart way to do it is to create one application that covers all services.

3. New Ownership

Sharing instead of owning: cars (BlaBla Car), music (Spotify), clothes (DressCode). One prominent example is wework. A business model that lets office space is not new, but by creating a community it won extreme affection.

4. User Interface (UI) is Emporer

The digital natives set the standards for the design of user interfaces and user experience. An example, proven by the automobile industry: The trend moves toward a dashboard that reminds customers of their smart phone. The Chinese company Geely realized this with the design of the Volvo XC90 and is miles ahead of it's competitors.

5. Content is King

The Key is to focus on new, self-designed and written content. Rich content will engage users and user engagement

is the most important KPI for Google to rank websites. BuzzFeed is a great example in order to grab the dimension of the importance of having a great content marketing strategy.

6. Actionable Data

For corporations it will become essential to achieve real progress in how to use data efficiently. Dataminr is a company analysing data effectively by accessing the whole data base of twitter and offering their results to companies or organization.

7. Digital Health

Consumers want to live a better, healthier and more active lifestyle. This new lifestyle has increased the popularity of wearables and very sophisticated mobile diagnostics. The next trend will most likely be artificial food.

8. Infrastructure Free-Ride

This trend is very tricky. Digital business models are often created within infrastructure-expensive environments. They help themselves by using already existing environments and putting their own KPI on top of it. One very prominent and hotly debated example is Uber. Uber uses the infrastructure of existing cars of private people by letting these people get registered with their cars at Uber and become a driver for the company. STEFAN HEILMANN

This article is based on the keynote by Stefan Heilmann, Managing Director at IEG – Investment Banking Group, held during the DHL Freight Management Conference on April 5th 2016 in Lisbon.

Additional

The complete Keynote



PUTTING A STOP TO NOMADIC LIVES

The German Transport Minister Alexander Dobrindt aims to improve the social conditions of truck drivers.

Regularly spending the weekends in a truck? Alexander Dobrindt wants to make that an exception for lorry drivers in Germany. In order for that to happen, the Drivers Act is to be amended. The Ministry has had the respective draft on the table since the end of 2015. The explanatory memorandum to the draft explains that “observations of traffic conditions have shown that many drivers, particularly from Southeast-European states, regularly make arrangements to spend their weekly rest period in the vehicle [...] This partly gives rise to sheer inhumane conditions.”

The draft of the Ministry envisages not only changes in the Drivers Act but also in the Road Haulage Act and the law governing the regulations of working times for self-employed drivers. According to the draft, employees will in future have to make sure “that drivers do not spend their regular weekly rest period in the vehicle”. It also includes the regulations that drivers must spend their rest period at their place of residence or at the company headquarters – and in a fixed accommodation. The duration of the weekly rest time must be

at least 45 hours. Only under certain conditions may drivers spend their rest time in the truck.

Thus, the draft actually goes quite far. “What at first glance seems plausible and goal-oriented, will probably fail not only because of European law-making, but also because the drivers’ right of self-determination is also an issue”, explains the managing director of the Federal Association of Goods Transport by Road, Logistics and Disposal (BGL), Karl Heinz Schmidt, in *Verkehrsrundschau* magazine. The BGL actually prefers a European solution, rather than a solitary effort by Germany. Because, national penalties have so far only led to logistics companies instructing their drivers to move to European neighbours. The EU transport ministers are actually already working on the revision of the relevant EU Regulation 561/2006 on the harmonization of specific social legislation relating to road transport. But it is still unclear how long this process will take and when the amendment will come into force. So it may be that the German legislation is in fact adopted faster. **STEPHANIE LEUWER**



Alexander Dobrindt,
German Federal Minister
for Transportation

Additional

Action plan for freight transport and logistics by the German Federal Ministry of Transport and Digital Infrastructure, chapter pg. 44, “Soziale Bedingungen für Berufskraftfahrer verbessern”



EU Regulation 561/2006





FUTURE PROPULSION

NEW POWER

Climate agreement, nitrogen oxide values and cheat software are making life hard for diesel engines. What are the alternatives?

Thanks to the latest climate agreement, the global efforts to reduce CO₂ emissions are now really picking up steam. And in German city centres, bans on diesel vehicles are becoming a realistic threat. Even if trucks are not affected: the cheat software affair has certainly not made diesel's reputation any better. But is road transport at all possible without diesel? What kinds of engines does the future hold? In any case, the efficiencies that can still be achieved with diesel engines are limited, and the experts of the Shell commercial vehicle survey 2016 expect no more than a 14 percent improvement in energy utilisation. A glance:

Natural gas engine

TECHNOLOGY: Both petrol and diesel engines can be converted relatively easily for the use of natural gas. The former are available as pure natural gas engines as well as in mixed forms that use a gas-petrol mix. The use of natural gas in diesel engines requires so-called dual-fuel engines, as natural gas alone would not ignite. A further development, which so far has not been offered in Europe, is high pressure direct injection (HPDI), which injects gas and diesel

under extreme pressure. This enables a large proportion of gas and efficient combustion.

EMISSIONS: Depending on the technology used, gas engines emit between six and 20 percent less CO₂ than an equally powerful diesel engine.

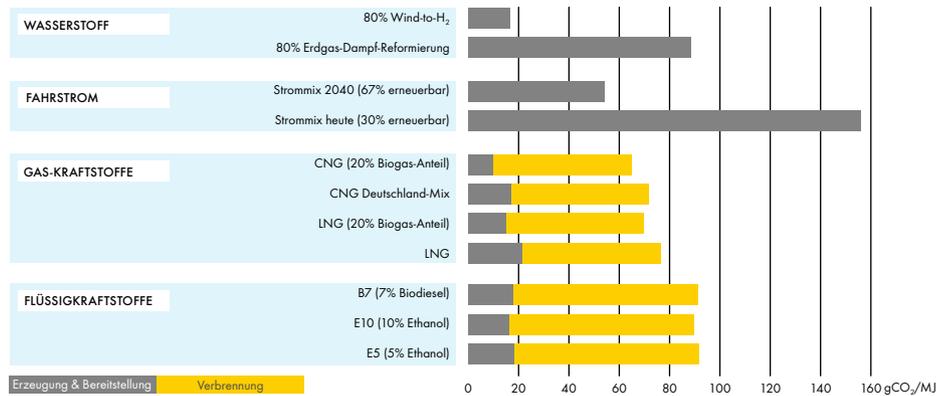
MARKETABILITY: Trucks with gas engines have already reached series production maturity and are available everywhere with various technologies.

ECONOMIC EFFICIENCY: Commercial vehicles with gas engines are currently about 30 percent more expensive than diesel vehicles. They are also subject to higher maintenance costs. However, the fuel costs are much lower. Higher numbers of vehicles will lead to falling prices in the long term, meaning that cost effectiveness will rise in the future.

Hybrid engine

TECHNOLOGY: Vehicles with internal combustion engine, additional electric motor and battery are currently available particularly for passenger cars and light commercial vehicles. And if they have a plug for external charging, they are called plug-in hybrid electric vehicles. This technology

CO₂-EMISSIONEN NACH KRAFTSTOFFNUTZUNGSPFADEN



is becoming increasingly popular for passenger vehicles. Initial pilot projects have also already been carried out with trolley-hybrid busses.

EMISSIONS: When it comes to the pure vehicle emissions, the CO₂ emissions can be reduced by about one third when using a plug-in hybrid system. However, the exact numbers also depend on the type of technology that is used for the generation of the charging current.

MARKETABILITY: The first small series of plug-in hybrids for light trucks and city buses are now available on the market. However, significant improvements are needed here, especially in terms of the batteries. Furthermore, the hitherto underdeveloped infrastructure for electric charging is still an issue.

ECONOMIC EFFICIENCY: The vehicle costs compared to diesel engines are currently very high (+30% for buses). However, long term considerations of costs in the commercial vehicle sector are not yet available. Real economic efficiency can only be expected in the distant future with further advances in user numbers, expected battery technology and electric infrastructure.

Fuel cell

TECHNOLOGY: In fuel cells, hydrogen reacts with oxygen, thus releasing electrical and thermal energy as well as water. Vehicles with fuel cells require smaller batteries than hybrid or purely electric vehicles, and fuelling is much faster than charging the battery of an electric vehicle. A disadvantage is the high technical effort for the design and manufacture of tanks, the still short service life of fuel cells and the lacking hydrogen infrastructure.

EMISSIONS: Hydrogen drive trains are zero emission engines when it comes to operation. However, the overall picture also has to include the energy required for the production.

MARKETABILITY: So far only a few prototypes exist in the commercial vehicle sector.

ECONOMIC EFFICIENCY: The cost of the vehicles currently significantly exceeds all other drive types. Cost-effective operation can be expected only in the distant future.

Electric power train

TECHNOLOGY: Electric vehicles are technically easy to implement. The problem here lies in the energy storage. An interim solution might be the possibility of charging during the journey through an overhead line or induction loop. Initial tests have already been carried out.

EMISSIONS: No emissions are caused during operation. However, the energy costs that occur during the production of the drive train as well as during the generation of the electricity have to be included in the balance. In the end, the exact numbers depend on the used electricity mix.

MARKETABILITY: The technology is available on the market, and even in larger series for passenger cars. Small commercial vehicles are also ready for series production. So far only prototypes exist for large commercial vehicles.

ECONOMIC EFFICIENCY: The acquisition costs are at least one-third above those for diesel vehicles. Furthermore, pure electric vehicles can still not be considered for long-distance transport. Actual economic efficiency is to be expected only with further advances, particularly in battery technology.

Conclusion

To sum it up, internal combustion engines will remain the instrument of choice in long haul freight services for the foreseeable future. First and foremost, this means the most efficient diesel engines possible and, albeit with some limitations, natural gas engines. Propulsion methods with severely reduced or even no emissions at all will play a significant role in last mile delivery services only.

STEPHANIE LEUWER

Additional

Download Shell commercial vehicle study 2016 (available in German only)





TRANSPORT SYSTEM WELL BELOW

A TRULY IN-DEPTH IDEA

Rails and roads in Switzerland will probably not be able to cope with the growing freight traffic of the future – the solution might lie beneath the earth.

Current prognoses of the Swiss federal office for roads and the federal office for regional development assume that goods traffic in the alpine republic will increase by up to 45 percent by the year 2030. However, today's infrastructure will not be able to deal with such volumes. And: The reserves for expansion are limited, especially in densely populated metropolitan areas, where there is hardly any space for additional railway lines or roads.

The association Cargo Sous Terrain (CST) believes the solution lies underground. The consortium, in which a number of

renowned companies such as SBB Cargo, Swisscom or Rhenus Alpinia are involved, already has concrete plans: Accordingly, it is envisaged that autonomous electric transport vehicles will move goods from point to point in three-lane tunnels. At specific locations, so-called hubs, loading and unloading will also be carried out fully automatically. In addition, an overhead package conveyor is foreseen under the tunnel ceiling for small consignments. The speed of the electric transportation vehicles will be a uniform 30 km/h or 60 km/h on the package track. The entire system will be computer-controlled, and

integration directly into the IT environments of logistics companies should be easily possible.

Fully automatic

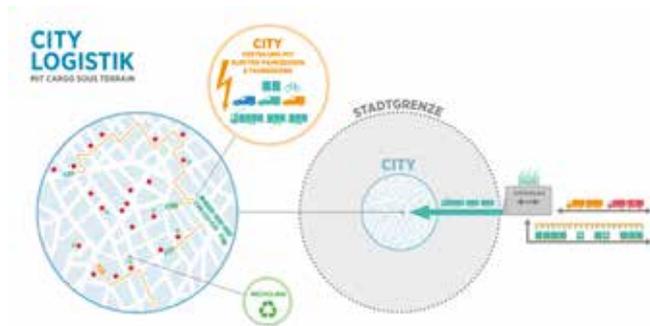
By 2030, CST wishes to put a first pilot route into operation between Härkingen-Niederbipp and Zurich. The projected costs are estimated at 3.5 billion francs. This is, for example, significantly less than for the Gotthard Base Tunnel and other major projects. The reason for this lies in the complete automation and the absence of people in the tunnel – apart from when maintenance work is carried out. As a result, the planners can completely dispense with escape tunnels, emergency exits and similar expensive ancillary facilities.

In its final development stage, the overall logistics system of the CST will supposedly connect the cities of Switzerland between Lake Constance and Lake Geneva and thus shift the majority of transport underground. A first feasibility study has already proven the requirements as well as the efficiency of the system.

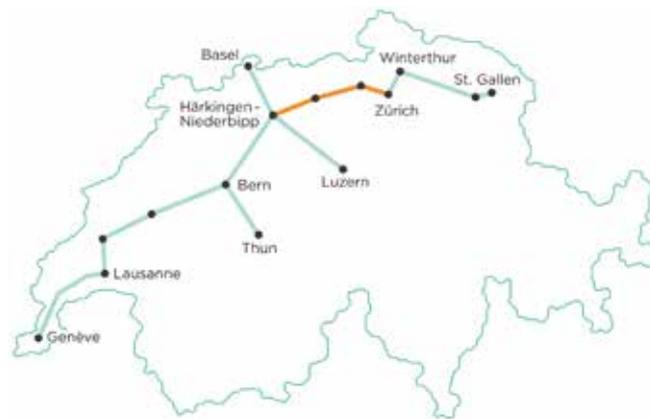
Innovative complete logistics system

It now comes down to convincing investors and getting the money together for the construction of the pilot project as quickly as possible. In any case, Peter Sutterlütti, President of the CST association, has already expressed his full confidence in a press release: “Cargo Sous Terrain is far more than a mere tunnel. It is an innovative complete logistics system, which connects the industrial and logistics areas with the large urban centres and vice versa – fully automatic and coupled with intelligent, future-oriented control systems”.

SONJA TERBRÜGGEN



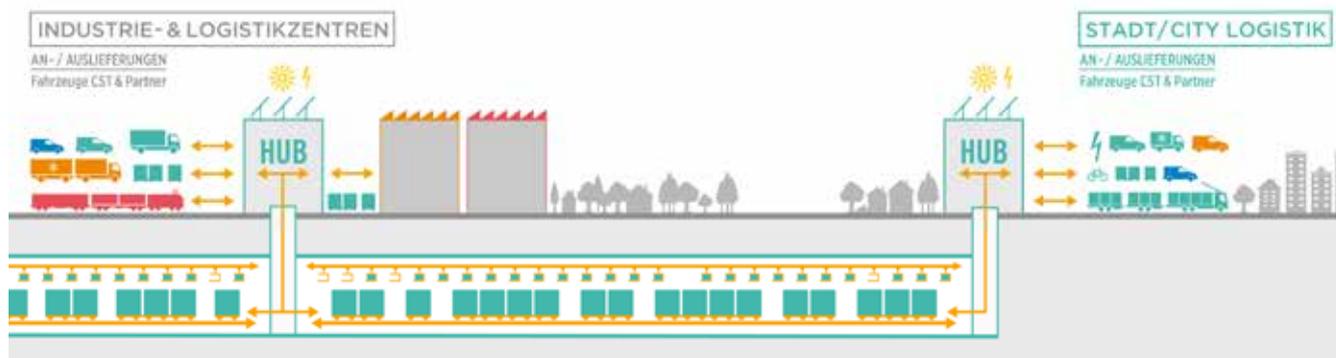
Details of the city distribution system



The planned underground freight network, pilot scheme coloured in orange

Additional

Website of the CST association



Cargo Sous Terrain uses tunnels underground between the loading and unloading hubs.



The South Korean shipping company Hanjin Shipping recently left the market with a bang: Ships of the Korean shipping company that got into financial difficulties in September were left lying at anchor without unloading their cargo. Which spelt disaster for many suppliers and consignees. As a further effect, freight rates between Asia and Northern Europe rose by almost 40 percent alone in the first week after the bankruptcy. But even without the difficulties of major shipping lines, the route between Europe and Asia is still long for freighters, and particularly when it comes to less-than-container-load freight (LCL) the sea route is also not always the most economical.

But there are alternatives, namely overland. Since 2013, DHL has been constantly expanding its multimodal network between China, Russia and Europe. In the meantime,

North Africa has also been connected, so that goods can easily reach destinations such as Morocco from the Chinese coastal regions of Shanghai and Shenzhen via European routes.

Short routes to customers

One of the main hubs is the DHL Freight Terminal in Duisburg. DHL Freight consolidates LCL deliveries at this geographically favourable intersection and thus provides the possibility of arranging intercontinental delivery chains in an uncomplicated way in order to make use of the time and cost advantages of the land route compared to sea and air freight. "The use of the railway network as a form of transportation between Asia and Europe has worked very well for DHL and is very much accepted as a true alternative by our customers. The location of Duisburg as a hub



INTERMODAL TRANSPORTATION

STAYING ON THE GROUND

Overland to Asia – new routes for overseas trade

plays an essential role. Shorter distances to customers and excellent intermodal connections provide many opportunities to deliver faster and to achieve greater cost advantages. We are therefore consistently expanding this area. Thanks to our new LCL products and DHL Railconnect, we are ideally positioned to make use of the strengths of our land transport networks in the interest of our customers”, says Amadou Diallo, CEO DHL Freight. “And even all the way to North Africa. We already have customers whose goods we can transport from China via Europe to Tunisia using the multimodal combination of road/rail/short-sea”, he explains.

But even customers with full loads or containers benefit from the connections via the hub in Duisburg. In cooperation with the Duisburger Hafen AG, DHL Freight provides

a link with all outgoing intermodal connections from here within Europe. 400 trains per week head for 80 different destinations throughout Europe.

Network being continuously developed

Part of the product portfolio also includes DHL’s extensive network in Europe, including multimodal hubs in Hamburg, Warsaw and Malascewicze on the Polish-Belarusian border, where groupage shipments, part or full loads are loaded directly from the road to all existing train connections. In combination with the area-wide presence in Asia, the expansion of the network enables DHL to cover the entire transport chain. Thanks to the intelligent combination of road and rail, DHL creates an essential added value for its customers through cost and time advantages.

ANNE GOERGEN

RALLYE DAKAR

ON THE FAST TRACK

Tracking solution by Agheera works even in the remotest areas.

Roughly 9,000 kilometres, 347 race cars, from sea level to altitudes of over 4,000 meters – that was the Dakar Rally 2016, which for security reasons was once again held in South America. Ellen Lohr, a former top DTM driver, who is now mainly involved in truck racing, drove the car of the Mercedes press team along the so-called service track, which at times was also extremely difficult and – just like the rally itself – went through areas where mobile phone networks and Internet access are rather hit and miss. But nevertheless, rally enthusiasts were able to take part in the action on her website every day. What was particularly important: to get an accurate overview of the current location. Easier said than done, as a GPS transmitter alone is not enough. Instead, a number of different elements have to fit together perfectly – from hardware and mobile telephone connection to roaming, the IT systems of the manufacturers and the integration into the own portal. All components are generally heterogeneous, as there is no such thing as a uniform standard in the world of real-time tracking, no matter whether it concerns the location information of rally vehicles or of important consignments.

Small but powerful

The solution for this jumble of different systems is provided by the company Agheera, based in Troisdorf, Germany, a subsidiary of Deutsche Post DHL. The company implements telematics solutions regardless of the diversity of the used components. All existing information is consolidated and made available for retrieval on a specially programmed platform. In addition, Agheera also provides its own hardware. In the case of the Dakar Rally, the device had the size of a mere matchbox, but mastered all chal-



lenges with ease, despite the fact that the conditions were far from ideal. “We partially had to deal with very harsh outside conditions. Monsoon-like rains, extreme heat and high altitudes made life difficult for us. But despite all the odds, the tracking system worked reliably the whole time without failure”, explains Ellen Lohr.

Christoph Keisers, the Managing Director of Agheera “We were indeed convinced that we had the right solution, but having actual proof is even nicer”. Incidentally, the cooperation with Ellen Lohr actually began with an encounter at the German Telematikpreis award in November 2015, which Agheera won with an application example for keeping track of 20,000 swap body systems of Deutsche Post. All tracking data from the Agheera software portal can be processed with virtually any system. “There are an incredible amount of different tracking devices on the market, which all use their own data formats”, says Agheera boss Keisers. “On our platform we can integrate almost all of these devices, so that ultimately customers require only one interface in order to be kept up to date – ours.”

KAI ORTMANN

Additional

Ellen Lohr on tracking with Agheera



Ellen Lohr's video blog for the Dakar Rally 2016



LEVANTE

SOLNERIFE



COUNTRY REPORT IBERIA

GATEWAY TO AFRICA

DHL Freight Iberia is relying on several pillars to assert itself in the difficult market environment in south-western Europe.

With six terminals, DHL Freight Iberia covers an area of 583,000 square kilometres, where approximately 53 million people live. Roughly 190,000 trips a year begin or end at one of these hubs, where 1,523,000 tons of goods were transported last year. From here, DHL Freight serves destinations in Spain, Portugal, Andorra and the neighbouring countries. The business with North Africa has lately become particularly important. "The market on the Iberian peninsula provides great opportunities across borders, primarily in northern Africa, due to its geographical location on the south-western tip of Europe. This is where the cargo routes to Morocco are particularly important", explains Santiago Mariscal, Managing Director of DHL Freight Iberia.

Two pillars

The transit business is firmly anchored in one of the two main pillars of DHL Freight Iberia, the Terminal-Based Operations (TBO). The hubs in Madrid, Barcelona, Valencia, Irún, Porto and Lisbon have a total area of 22,800 square meters. They serve to connect the Iberian peninsula and

ultimately North Africa to the European line network. All stock transfers and storage are carried out via these sites.

But DHL Freight Iberia also has a second strong pillar, namely Direct Contract Carriage (DCC). With these point-to-point connections, DHL Freight Iberia operates the fleets for individual customers and at the same time has the opportunity to fill up spare capacity with cargo from the normal line of business. And if the capacity of a customer's own fleet is not sufficient, DHL Freight can react particularly quickly and select a service provider from its own, quality-tested pool of partners. This avoids long searches for suitable carriers in overload situations.

Pharmaceutical specialist

In addition to these main pillars of the business, DHL Freight Iberia is also active in several other areas. A special emphasis is currently being placed on the expansion of the FarmaFreight services for the transport and intermediate storage of pharmaceutical and bio-medical goods. For this purpose, DHL Freight Iberia has created its own competence centre that complies with high temperature and safety standards.

Quality is a top priority at DHL Freight Iberia. And it can only be achieved with rested drivers. That is why drivers have a designated driver's corner at their disposal in every terminal for rest and recuperation.

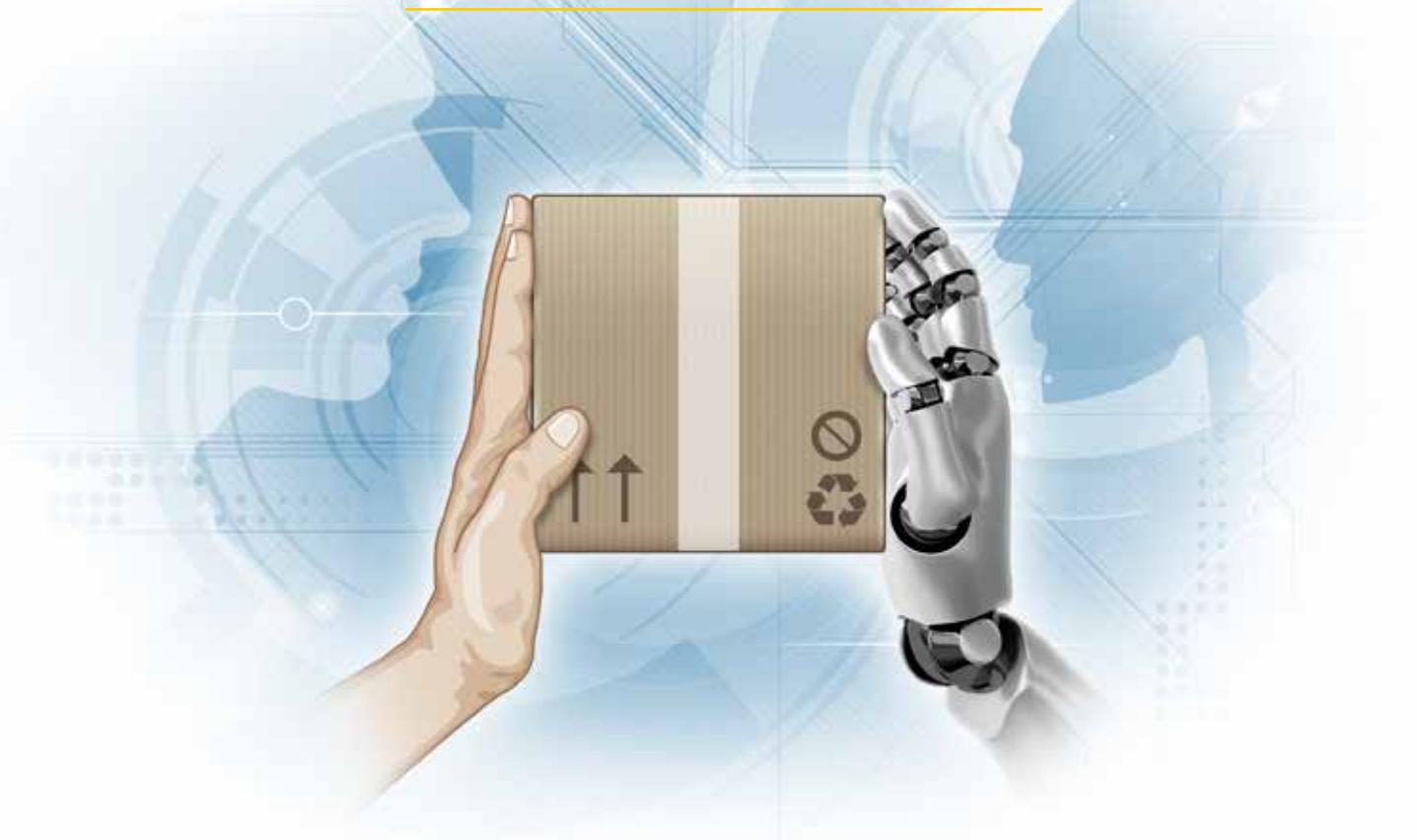
Long-time customers benefit from the Club Freight programme that rewards loyalty with various bonuses: from discounts to special service offerings.

For the future, the focus will be placed on the expansion of connections to North Africa, as well as further cost optimization and improved service. And ultimately this also includes the establishment of an own customs department in order to settle cross-border deliveries as soon as possible, and to give customers a time advantage. Combined with the further optimization of processes in collaboration with colleagues in the surrounding countries, DHL Freight Iberia will continue to be the trailblazer for logistics in south-western Europe in the future too. **BIRGIT KUPAS**

ROBOTICS IN LOGISTICS

(WE ARE) THE ROBOTS

Deutsche Post DHL study: Collaborative robots indispensable in the future of logistics.



"We are the robots, we are programmed to do everything you want us to do". 38 years ago the song by the German electronic music band Kraftwerk made history. Machines that do the work of people is one of mankind's oldest dreams. While in industrial production, for example in the automotive and engineering industries, robots are already part of the standard, the logistics industry still has some catching up to do. Recent studies show that the processes

at 80 percent of all logistics locations are still carried out manually.

That will soon change, according to the forecast of the trend report "Robotics in Logistics" published by Deutsche Post DHL. Accordingly, collaborative robots will change supply chains fundamentally. It is thus that logistics robots will soon be able to provide support in picking and packaging as well as in the transport of goods.

“Robots are used in many industries, but have not yet had a proper impact on logistics due to the complexity of the processes,” says Matthias Heutger, Senior Vice President Strategy, Marketing & Innovation, DHL Customer Solutions & Innovation. “The regulation of an infinite number of product and process combinations in cooperation with people in enclosed spaces is a challenge for robots. Recently, however, the technology is catching up, as flexible, cost-effective and collaborative robots are increasingly in demand”.

Drivers of development are the growing e-commerce sector on the one hand, and the lack of skilled workers and the need to consolidate on the other. Contrary to the situation in retail stores or in industrial production, goods logistics requires special machines that work in a highly individual manner. A warehouse worker covers a distance of between 7 and 15 miles per shift in order to put together the ordered items. A robot that can replace such a worker must be able to move independently and to grab and see things. The DHL study presents realistic scenarios that demonstrate how intelligent robots are able to optimize

supply chains or even the sorting process. They cover the entire supply chain from self-propelled trucks and mobile robots that unload the goods to drones and exoskeleton suits. Equipped with such suits, people can easily carry heavy loads of up to 80 kilograms.

Accordingly, the investment in the development of robots is increasing everywhere: Within the framework of the SPARC programme from the European Commission, the EU is investing around EUR 700 million in robotic research, while China and Russia are planning to invest USD 200 million in a joint research centre. A consortium of 180 European companies plans to collect EUR 2.1 billion for research funding over the next four years.

The trend report “Robotics in Logistics” highlights current developments in robot technology from the perspective of leading experts from academia and industry, and is part of the overarching “Logistics Trend Radar” with which DHL is identifying relevant trends and technologies for the logistics industry.

ANNE GOERGEN



Additional

Study „Robotics in Logistics“





PULLING ALL THE STRINGS

The outsourcing of logistics is key of Syngenta's strategy. The leading global agricultural group with headquarters in Basel relies on fourth-party logistics providers (4PL). And that's where DHL comes into play.

It took only four months up to the rollout, and the first part of the new Syngenta 4PL infrastructure for Europe and Russia was ready. The real launch took place in October 2015, after DHL had been awarded the contract as new European 4PL provider in mid-May. The reason for the rush: It was crucial for Syngenta to have the complete solution in place before the agricultural peak season.

"Syngenta's logistics strategy is designed to leverage the logistics expertise of our partners, I believe through working in partnership with DHL, both companies will benefit from this relationship" said Marion Matthewman, Head of Syngenta Global Logistics.

"Syngenta had a very clear vision on what they wanted to achieve: outsourcing logistics and establishing it as a differentiating factor in a highly competitive market," said Thomas Weins, Managing Director Agheera GmbH / Head of LLP DHL Freight. "We have developed a comprehensive end-to-end solution that addresses all of Syngenta's needs, such as logistics sourcing, monitoring, analytics and transport planning."

As Syngenta's fourth party logistics provider, DHL Freight takes responsibility for the steering of transport activities – from defining transport demands, tendering and contracting, to on-boarding new logistics partners, monitoring the currently running operations and trade flows and above all driving continuous improvement in the supply chain.

The implementation of this complex, 4PL solution entails multiple phases and will be completed by 2018. The first

phase of the project was implemented in only four months and was successfully completed in October 2015. "Through close collaboration between Syngenta and DHL significant improvements in service and cost have already been identified and implemented" said Paul Lidbetter, Head of Syngenta European Logistics.

DHL Freight is currently working on the second phase of the project which when fully complete will see DHL manage 150,000 shipments annually.

BIRGIT KUPAS

DHL's 4PL concept is based on four pillars

- 1. Logistics Sourcing:** Procuring transport capacity by defining requirements with Syngenta, managing tenders and dealing with contracts, as well as the on-boarding of new partners
- 2. Logistics Planning & Execution:** This covers planning and tracking of shipments, exception and event management as well as auditing and processing invoices from carriers on behalf of Syngenta
- 3. Monitoring:** Monitoring of Syngenta's flows is key to pro-active management of them. A seamless integration between DHL's IT platform and Syngenta's middleware ensures timely exchange of information
- 4. Analytics:** DHL uses state-of-the art analytics to support the management team in identifying problem areas and to drive continuous improvement through joint initiatives with carriers and with Syngenta teams

REAL-TIME-TRACKING

YOUR FREIGHT IN YOUR POCKET

The new DHL Freight mobile app.



Some 84 percent of internet users go online daily. Around 66 percent of Europeans use a smartphone, and check it often. The growing presence of these devices in our lives has shifted how we get informed, interact, and do business – and the road freight industry is no exception. The trend is clear: customers expect simple and seamless experiences whenever they want, and wherever they are. Recently, a DHL Freight customer survey found that one in three customers would like to interact with the company using both their desktop and their mobile device. In addition, they are looking for more functionalities than just shipment tracking.

Easy Access

Following this trend, a new app has been developed for its customers. This is a starting point in providing a better customer experience and making DHL Freight easier to find and contact. The app offers simple to use self-service features, such as shipment tracking and transit time calculation.

Tracking

The shipment tracking function makes it possible to have visibility on the status of the shipment with no log-in required, by simply scanning the bar code of the shipment with the camera, or entering the Order Code or Consignment ID. Customers can store multiple shipments in the app and get updates on them without re-entry, whenever needed.

Time Calculation

With the Transit Time Calculator, users can input their pickup and delivery information and get an accurate esti-

mate of the duration of the transport. It enables planning of shipments up to 8 weeks in advance on international LTL and Groupage shipments.

The mobile app also offers the possibility to contact Customer Service via phone or email, find DHL Freight locations in over 30 countries across Europe and stay up to date with news from the logistics field. These features make the app a useful tool for any business partner, providing quick answers, anytime.

“The mobile DHL Freight app is an interface and only the beginning of our planned efforts to strengthen customer commitment and the targeted alignment of our business processes in an increasingly digital world,” says project manager Hooicheng Beh.

KAI ORTMANN

Additional

The app is available in English and can be downloaded on Apple (compatible with iOS version 9.0 or higher) and Android devices (Android 4.4 and up).



TOPS AND FLOPS: CARGO HIJACKING

LOOKING FOR LOOT

Truck broken into, cargo gone – or even the entire truck gone. That can happen anywhere in the world. But there are countries where it happens more often.

Truck broken into, cargo gone – or even the entire truck gone. That can happen anywhere in the world. But there are countries where it happens more often: In many South American countries, for example, the risk of cargo being stolen is very high. That is where organized crime and the economic recession are the relevant factors. But other countries such as Russia and India are also having

problems to significantly reduce the number of heists. Within Europe, amongst others Belgium and the Netherlands are at the top of the list of countries with a high risk of cargo being stolen, which is greatly influenced by the major international ports in Rotterdam and Antwerp. The lowest risk of theft, on the other hand, is in Norway, Japan and New Zealand. RICK TILLENBURG

WHERE IS YOUR CARGO SAFE?



Worldwide

Tops

- 1. Japan
- 2. Iceland
- 3. South Korea
- 4. New Zealand
- 5. Norway

Flops

- 1. Algeria
- 2. India
- 3. Indonesia
- 4. Mexico
- 5. Russia



Europe-wide

Tops

- 1. Iceland
- 2. Norway
- 3. Austria
- 4. Czech Republic
- 5. Denmark

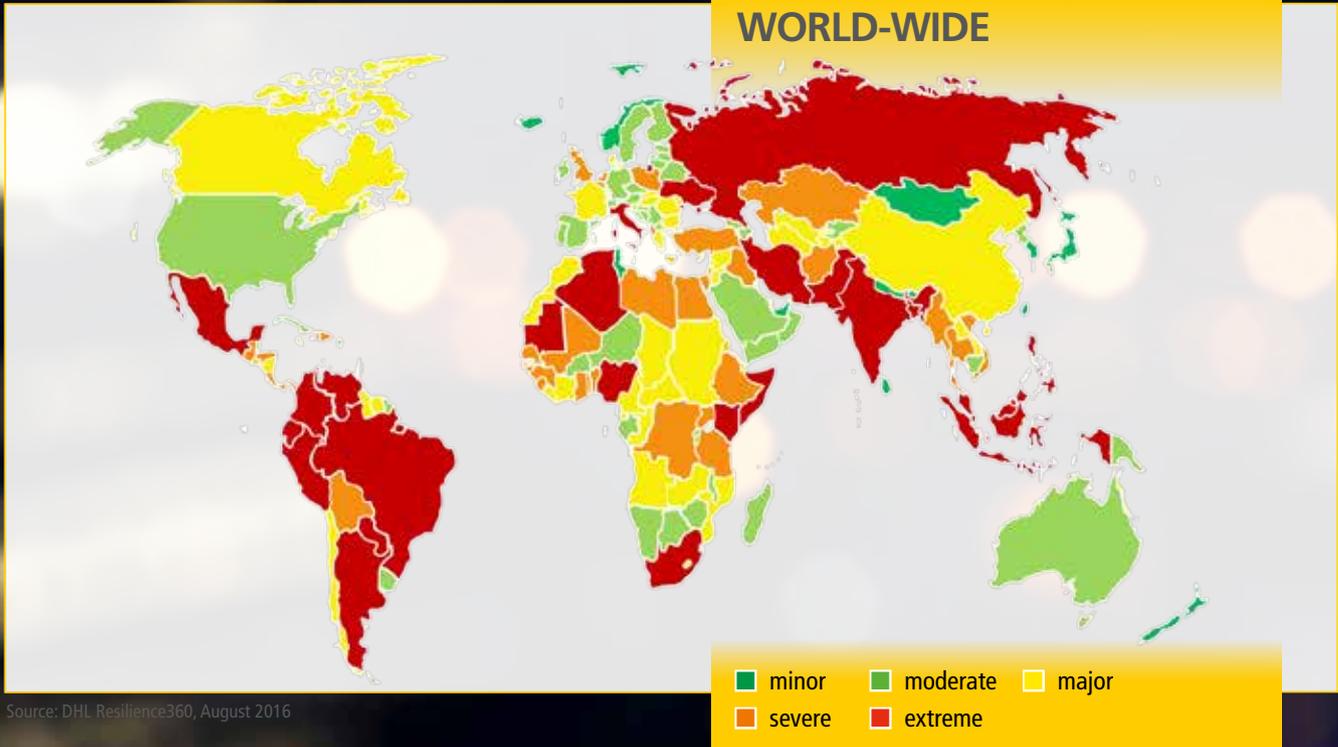
Flops

- 1. Russia
- 2. Ukraine
- 3. Italy
- 4. Belgium
- 5. Netherlands



Source: DHL, Resilience360, August 2016

CARGO HIJACKING WORLD-WIDE



Source: DHL Resilience360, August 2016

DHL Resilience360

DHL Resilience360 is an end-to-end supply chain risk management platform that alerts customers about global incidents and risks to their global supply chain in almost real time – enabling customers to maintain an advantage over their competitors by immediately responding to incidents and pre-empting or minimizing business interruption.

Resilience360 is used by customers across Asia, Europe and the Americas. The largest uptake has been in the automotive industry, followed closely by chemicals, life sciences and the technology sector.

Additional

Video of
DHL Resilience360



STUDY FOOD LOGISTICS

FOOD-TRUCK 2020

Current study results show: Omni-channel is one of the important future trends in food logistics. That means new challenges for manufacturers, retailers and – of course – logistics.

Food logistics is an industry that has always shown a high amount of dynamics. In recent years, however, this has increased even more, as the newly published study “Zukunftstrends der Lebensmittellogistik” (Future Trends in Food Logistics) by the Department of Logistics at the TU Berlin, Germany, has found out. Accordingly, changing consumer behaviour has led to new trends that will significantly influence the supply chains of tomorrow.

Efficient omni-channel logistics

The digitalisation of society is leading to the spread of models like e-commerce in the food industry and home delivery. This is causing the food retail sector to provide new delivery services and to expand its core business through trend-oriented services. At the same time, the available space in cities for appropriate storage is limited, which in particular makes the last mile to the consumer difficult and costly. The Berlin scientists see the solution in creating efficient omni-channel logistics, which combine the hitherto separate logistics systems for online and stationary customers.

This is where not only retailers but also logistics service providers will have to act in future. They should back innovative concepts that provide dealers with clear benefits in terms of efficiency. It will therefore be important to devise bundling strategies to enable the provision of smaller packages from the surrounding area as compactly as possible via distribution centres. Central delivery services for convenience foods may one day be able to replace the many individual delivery services. And the centralized return of unneeded food, either to social institutions or for example to biogas plants, is also a conceivable idea.

Avoiding waste

The latter aspect is also reflected in the Technical University of Berlin’s recommendation that manufacturers, retailers and logistics providers should make a concerted effort to reduce food wastage along the supply chain. The required better integration of the IT of all three parties also serves to fulfil this purpose. This would, for example, enable much better verification that the cold chain is maintained. A positive side effect: The transparency that is being increasingly demanded by consumers when buying food can thus be provided relatively easily through appropriate apps based such integrated IT.

Upgrading vehicles

When it comes to the vehicles, the researchers from Berlin see particular demand for action in the last mile of the distribution chain. This particularly includes alternative drive systems and multi-compartment vehicles, which combine different environmental conditions on a single platform. It is thus clear that there are a number of future areas of action that have to be dealt with in the food logistics sector.

MICHAEL WAYAND



Additional

Download the study “Zukunftstrends der Lebensmittellogistik” (available in German only)

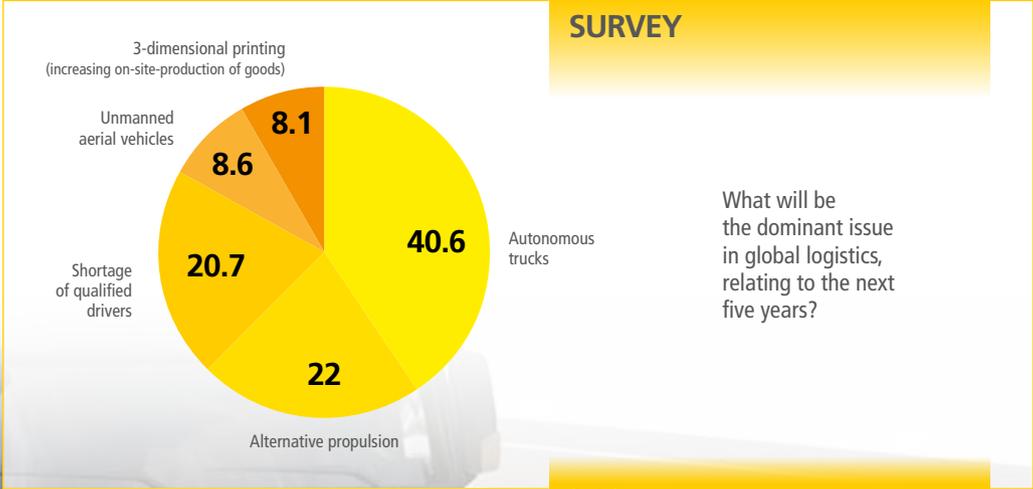


WORK-MATE COMPUTER

Results of the Freight Connections survey on the global trends in logistics

Autonomous driven trucks are one of the leading trends within the logistics industry. That fact was clearly proven by the results of our June survey. Again, we could rely on high participation numbers by our readers. Thank you very much for that! And now for the detailed results:

RESULT OF SHORT SURVEY



What will be the dominant issue in global logistics, relating to the next five years?

(in %)

Source: DHL Freight Connections

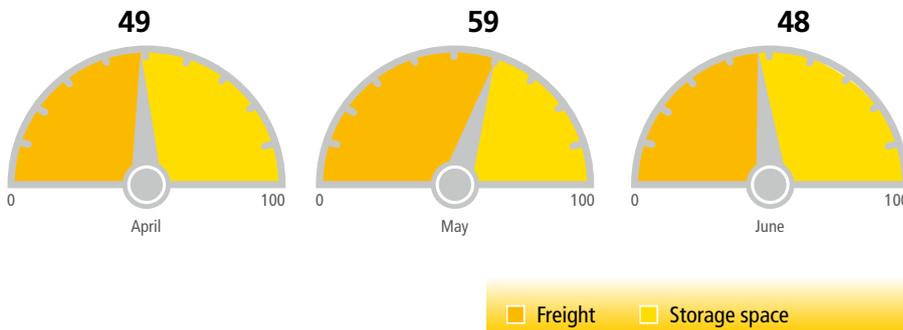
TRANSPORT-BAROMETER

On the rise



CURRENTLY FREIGHT CAPACITY UTILISATION

Share of freight* (in %)



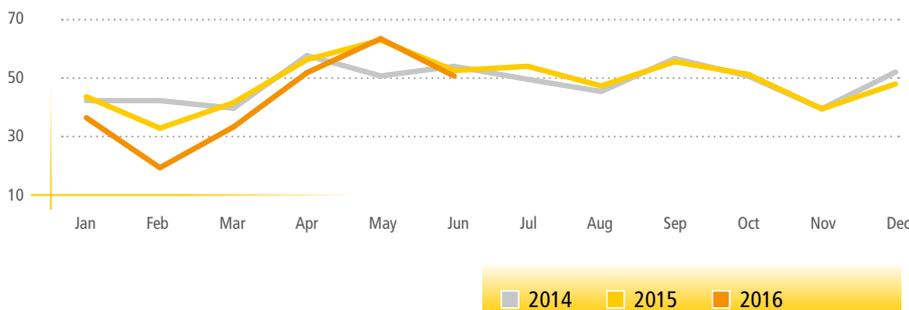
*Share of freight capacities compared to all capacities traded at the transport platform TimoCom (the sum of freight and vehicle capacity)

Source: TimoCom Transportbarometer: www.portatio.com/Transportbarometer, July 2016

In the 2nd quarter of the year the European transport market recorded a slight cargo overhang. Overall, recent months saw significantly more cargo than at the beginning of the year, however with major fluctuations. For TimoCom's Chief Representative Marcel Frings the explanation is obvious: "The rise is due to the many long weekends and correspondingly short working weeks in the holiday month. Dispatchers thus had to get the goods to customers in less available transport time."

YEARLY COMPARISON OF FREIGHT CAPACITY UTILISATION

Share of freight* (in %)



*Share of freight capacities compared to all capacities traded at the transport platform TimoCom (the sum of freight and vehicle capacity)

Source: Transport barometer app, <http://www.timocom.co.uk/TimoCom/TimoCom-mobile>, July 2016

Quiet outlook

The experts from TimoCom believe that the next quarter will be rather quiet as was the case in previous years, and that freight volumes will exceed the available capacities in the market again in autumn. However, the impact of Brexit is still difficult to assess. "The outcome of the referendum was an unexpected shock and its implications are still somewhat uncertain at this point in time," explains Frings.

DIESEL PRICES

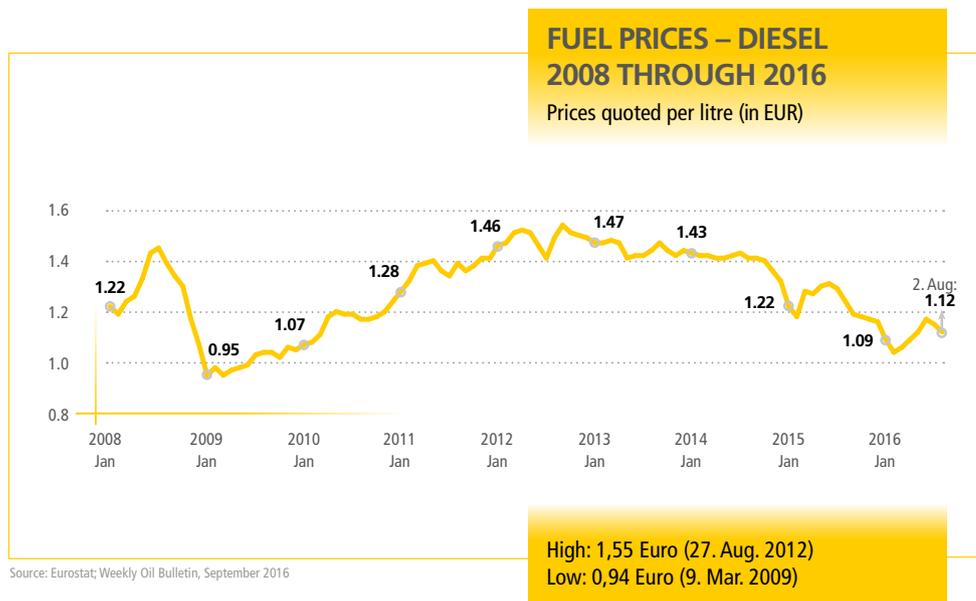
Comment by Eugen Weinberg,
Head of Commodity Analysis at Commerzbank



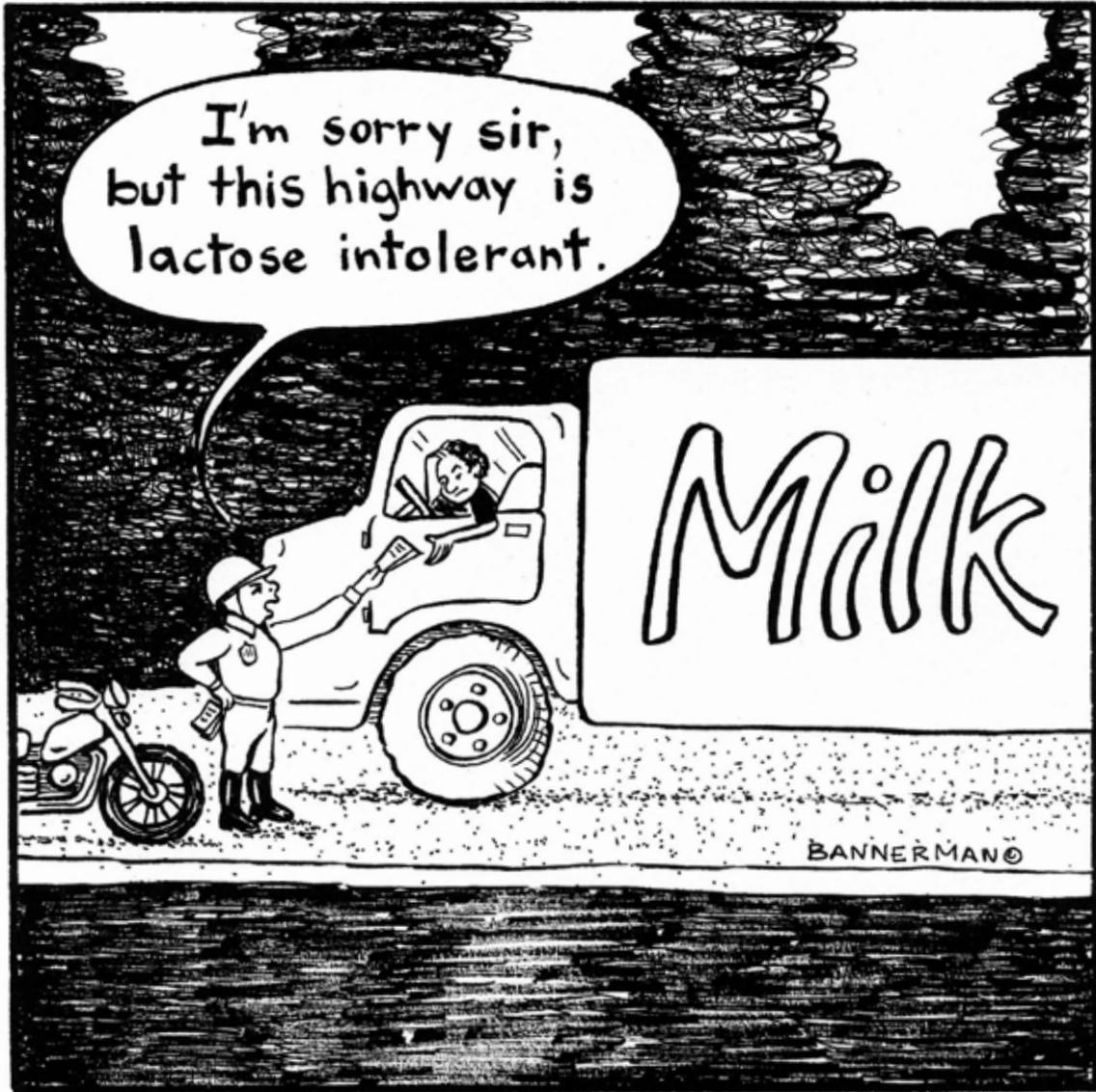
The price of oil has risen about 20 percent since the beginning of August and again surpassed the psychological mark of \$ 50 per barrel, which has also boosted the price of diesel. The crucial aspect for the rise in oil prices was an improvement of the general mood on the oil market. The market is expecting an agreement on maximum production limits at the meeting of OPEC and non-OPEC producers in Algeria in September. The demand side was also rather resilient recently, although 1.6 million cars – amounting to an increase of 26.5 percent compared to previous year – were sold in China in July. But the market currently seems to be “deaf in one ear” and is not taking

into account the fundamental factors that speak against the rise in prices.

Firstly, exploration activity has risen sharply in the US thanks to higher oil prices, and the number of active US oil drilling operations has increased by 30 percent to about 400 in the past three months. Secondly, the actual demand for oil in China does not seem to have been that strong recently. Because in July alone, China exported 2.5 million tons of diesel and petrol, which is as much as never before. In particular, the oversupply on the global diesel market seems to be quite high given the currently moderate commercial and industrial activities.



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