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EU LOGISTICS: Meeting new challenges

Freight traffic in Europe is steadily growing, and most of its ports, air carriers, and third party logistics providers are making investments in infrastructure and networks to cope with today's new challenges and increase their safety and environmental standards.

By Dagmar Trepins, European Correspondent

It's been a turbulent eight months for European carriers, service providers, and ports as they faced rising fuel prices, the aftermath of the Japanese earthquake and tsunami, political unrest in the Middle East and North Africa, the international debt crisis, and slower economic growth that overshadowed business developments across the region and the world.

Nevertheless, freight traffic in Europe is steadily growing, and most of the ports, air carriers, and freight forwarders are making investments in infrastructure and networks to cope with today's new challenges and to increase their safety and environmental standards.

So, if you're a U.S.-based logistics professional looking to establish or strengthen your logistics and transportation network across Europe, here's a comprehensive update on the state of European logistics as well as the challenges carriers and service providers are currently facing on the roads, on the rails, on the water, in the ports, and in the air.

Air cargo: Still cloudy

According to the International Air Transport Association's (IATA) recent 2011 traffic results, the global air cargo volume dropped by 3.0 percent, while European air carriers reported a 1.3 percent decline compared to June 2010.

Europe's two leading airlines certainly weren't immune to these challenges. In its April-June 2011 quarterly report, the cargo unit of Europe's largest carrier, Air France-KLM, posted an operating loss of 14 million euros ($20.2 million) due to the crisis in Japan and overcapacity on China departures. Revenues increased by 3.2 percent to 799 million euros ($1.15 billion) compared to the same period last year. During the year, the carrier has concentrated its Air France-KLM Cargo and Martinair Cargo's Americas operations in Atlanta "under one roof" to streamline work and the flow of communication.

In the first half of 2011, Lufthansa Cargo posted an operating profit of 133 million euros ($191 million),

Top 15 European Container Ports
(Container throughput 2010, million TEU)

The times of empty ports in Europe are finally over. Most of the ports have used the recession to make themselves more competitive, and their investments in infrastructure, IT, and networks are paying off.

Source: Port of Hamburg Margeting

falling by 7.6 pecent compared to last year. The carrier's revenue increased by 17.1 percent to 1.5 billion euros ($2.2 billion), while the cargo volume rose 14.8 percent to 953,000 metric tons.

The first half of 2011 saw a capacity increase that came mainly from the MD11 cargo aircraft reactivated following the crises, the 777 freighters delivered to Aerologic—a joint-venture with DHL Express—and Austrian Airlines' capacity that has been integrated into Lufthansa's system since July 2010. In conjunction with a 19.7 percent rise in capacity, the load factor dropped by 3.3 percentage points to 69.1 percent over last year.

Growth was particularly pronounced in the Americas, where tonnage climbed 19.5 percent compared to Europe where it rose 13.4 percent. "Lufthansa Cargo has harnessed the robust development of the global economy and sustained the growth momentum from the previous year," says Lufthansa Cargo Chairman and CEO Karl Ulrich Garnadt.

"We've made our network even more attractive with the addition of new destinations and invested to good purpose in the ongoing development of our products. We posted gains especially in the special services we offer customers to meet their specific needs," says Garnadt.

Expanding its network and improving services, the carrier has also opened a new office in Houston to extend its charter service in the oil and gas industry. The company also made investments into additional transport capacity and IT. "Order placements for five new aircraft of the Boeing 777F type, the re-design of our cargo center in Frankfurt, and modernization of our IT landscape will be of crucial importance for the success of Lufthansa Cargo in the years ahead," adds Garnadt.

Complaints about ETS

It seems that 2011 will continue to be a turbulent year for the aviation and air cargo industry. The introduction of the EU Emissions Trading Scheme (ETS), which forces airlines flying through EU airspace to join the ETS system and buy carbon credits from January 2012 on, has provoked international protest in the industry during the last months.

"The EU is not sovereign over the U.S. or the rest of the world, and has no right to levy taxes outside of the EU," says Tom Petri, chairman of the U.S. Aviation Subcommittee. Petri suggested working with the international civil aviation community through the UN International Civil Aviation Organization to seek a global solution.

European airlines also expressed concerns about ETS. Lufthansa CEO Christoph Franz, for example, fears a massive distortion of competition for European carriers and a shift of traffic via the Middle East. He estimates additional costs of 150 million to 350 million euros per year for his company to comply with the ETS system. IATA general director Giovanni Bisignani also calls for a global approach and warns against a "$1.5 billion cash grab that would do nothing to reduce emissions."

EU Ports: Expansion time

The times of empty ports in Europe are finally over. Most of the ports have used the recession to make themselves more competitive, and their investments in infrastructure, IT, and networks are paying off—as results from the first half of 2011 clearly indicate.

Port of Antwerp: Europe's second largest port, Antwerp handled 96 million metric tons of freight during the first six months of this year, representing an increase of 10.4 percent compared with the first half of 2010. Container cargo went up 3.4 percent from 51.3 million metric tons to 53 million metric tons. In terms of standard containers (twenty-foot equivalent units), the volume increased by 4.3 percent to 4.4 million TEU. Conventional/breakbulk cargo also showed a high growth rate of 16.9 percent, while bulk cargo rose by 21.5 percent and ro-ro increased 16.3 percent over the same period last year.

The deepening of the Western Scheldt has made the port easily accessible not only to ultra-large container ships of over 10,000 TEU, but also to capesize vessels. These bulk carriers are too large to pass through the Panama and Suez canals and have to travel around the Cape of Good Hope or Cape Horn. The port has established the “dry bulk” workgroup, made up of various players in the port, to bring such large carriers to Antwerp and to boost its position as a leading hub for large-scale, coal handling and conventional breakbulk. The arrival of the first capesize vessel, MG Courage, in July is a result of this joint initiative.

Port of Hamburg: Germany’s largest seaport showed strong growth in seaborne cargo throughput in the first half of this year. Hamburg handled 64 million metric tons of cargo, which is 9.4 percent more than during the first half of 2010.

With a growth rate of 17.4 percent, container traffic via Hamburg amounted to 4.4 million TEU in the first six months of this year. The biggest increase in Hamburg’s container trade was with the U.S. where the port reported an increase of 47.4 percent and was successful in winning back market shares in the European-U.S. Atlantic container trade.

New liner services and Hamburg’s geographic position, which offers very short distances to the growth markets in Eastern Europe and Russia, are advantages responsible for this positive development. In August, the PAX container liner service changed from their former German port of call, Bremerhaven, to Hamburg. This liner service, operated by the shipping lines Hapag Lloyd, NYK, and OOCL, now offers fast Atlantic passages for U.S. and European shippers via Hamburg.

Investments in infrastructure and development of new IT services further improve the service of Northern Europe’s hub port, a main distribution center for trade with Germany, the Baltic Sea region, Eastern Europe, Austria, Switzerland, and Russia. The port also invested in a new electronic road traffic management system to inform truck drivers about the current traffic situation on the port roads.

In 2012, the port is also going to implement a new IT system to optimize its rail traffic network within the port area. With more than 220 cargo trains per day, Hamburg is Europe’s largest rail port.

Port of Rotterdam: In the first half of 2011, 215 million tons of cargo was handled in the Port of Rotterdam, a

Geodis Wilson took two, 42-meter-long blades (inset) from a production facility in China and shipped them to Denmark—the longest, single cargo elements ever transported by air. Around 600 new offshore wind power stations are planned along the coasts of Great Britain, Denmark, Germany, Belgium, and the Netherlands through 2040.

light growth of 1 percent compared with the same period of 2010. Europe's largest port showed an increase of 12.2 percent in general cargo throughput, which reached 74.7 million tons.

Container traffic went up by 9.7 percent to almost 6 million TEU, mainly driven by new services to and from the Far East and South America, increases in transshipment especially to and from Russia, and recovery in intra-European short-sea traffic. Trade with North America declined due to cuts in the number of services calling at Rotterdam.

"The significant unrest on the financial markets and its influence on the trust of consumers and producers can have a negative influence on world trade and thus on our throughput," says Hans Smits, CEO of the Port of Rotterdam Authority. "There is a significant need for quicker and clearer political decision-making to sway negative sentiments. I expect that throughput in the third quarter will stay on target." The port's main expansion project, Maasvlakte 2, is proceeding according to schedule and the first containers are expected to be processed in 2013.

Duisport: Europe's largest inland port, Duisport set a new record in the first half of the year. Container transport by ship, rail, and truck rose to 1.2 million TEU, up more than 10 percent compared with the previous year's period.

"If the development in container handling continues into the second half of 2011, we are optimistic that last year's record of 2.25 million TEU in total from can be increased again," says Erich Staake, CEO of Duisburger Hafen AG. According to Staake, the basis for this success is the port's business model as an integrated provider of logistical services.

The port attracted new investors this year, such as the international logistics company Samskip, with its subsidiary Van Dieren for its new intermodal transport terminal in Hohenbudberg. With a focus on the growing Brazilian market, Duisport and the Brazilian ports ministry also signed an agreement to support the government in drafting a logistics concept for the so-called Sao Paulo-Santos corridor for flows of goods between the Brazilian coast and hinterland.

Port of Hamburg has invested in a new electronic road traffic management system to inform truck drivers about the current traffic situation on the port roads.

EU 3PLs: Strong performance

Despite the debt crisis in Europe and a volatile world economy, Europe's leading third-party logistic providers (3PLs) are recording a strong performance. According to Transport Intelligence's (Ti) latest *Global Freight Forwarding 2011* report, European forwarders dominated the market in 2010 by occupying six of the Top 10 positions with a 44 percent share of the total global market.

The world's largest forwarder in terms of combined air and sea freight revenues was Kuehne+Nagel, followed by DHL, DB Schenker, and Panalpina. The U.S. forwarder Expeditors ranked fifth, followed by Sinotrans, CEVA Logistics, Agility, UPS Supply Chain Solutions, and DSV.

In giving an outlook for 2011, Ti's CEO John Manners-Bell points out the following: "Forwarders are enjoying somewhat of a golden period. Air and sea volumes are still growing, albeit not as rapidly as last year. In addition, extra capacity brought on by shipping and air carriers has meant that rates have softened, meaning that forwarders' gross margins will expand. Our research suggests that this should be by around 2 percentage points."

During the first half of 2011, the Kuehne + Nagel Group achieved growth above the market average in all business units. Despite considerable negative currency effects, net earnings improved by 11 percent to CHF 312 million. Seafreight volumes increased by 12 percent in the first half of the year, doubling the market growth rate of 6 percent, mainly achieved by exports from Europe to North America and Asia as well as from Asia to Latin America and the Middle East.

Despite a sharp decline in volumes in the global airfreight market during the second quarter, the group increased its tonnage by 18 percent in the first six months. Kuehne + Nagel's expansion in perishable logistics following acquisitions in South America, as well as increased demand in the trade lanes from Europe to North America and Asia, contributed to the strong performance.

DB Schenker, the logistics arm of the German national railroad Deutsche Bahn and one of the leading transport and logistics providers in the U.S. and Europe, has restructured and expanded parts of its transportation network. In July, the company announced that it would eliminate its U.S. air fleet and close its Bax Global cargo hub in Toledo, Ohio. "As a result of the prolonged recession and spiking fuel prices, more customers are opting for expedited ground-based solutions instead of domestic air freight," says Schenker CEO Heiner Murmann.

DB Schenker, which combines the units DB Schenker Rail and DB Schenker Logistics, has expanded its rail services to shift cargo from road to rail.

The company will continue its air cargo business through a more flexible cooperation with other carriers and with a new focus on smaller clients who need transportation management. In Europe, DB Schenker, which combines the units DB Schenker Rail and DB Schenker Logistics, has expanded its rail services to shift cargo from road to rail. In the summer, DB Schenker Rails ran the first European sized freight train via High Speed 1 in the U.K.

The curtain-sided swap bodies moved on this train, with an internal height of three meters (around 9 feet, 10 inches), provide significantly larger haulage capacity. In the U.K., they can only be utilized on the High Speed 1 route from the Channel Tunnel to London, as it's the only European-sized rail route in the country.

Following the success of this initial operation, DB Schenker Rail plans to run the first full train of European-sized swap bodies, and then initiate regular services to connect the U.K. to the rest of its pan-European rail freight network via the High Speed 1 route. This will open a new market for customers to export and import goods more efficiently using larger railcars.

New market for EU 3PLs

While looking for new markets, the wind energy sector offers new potential for EU logistics providers. According to analyses by the Prognos Institute, expansion in offshore wind energy production is strongly centered on Europe.

Europe now accounts for 86 percent of the wind power farms currently approved, in construction, or in operation worldwide. They add up to a total capacity of around 28 gigawatts. Around 600 new offshore wind power stations are planned to be built along the coasts of Great Britain, Denmark, Germany, Belgium, and the Netherlands through 2040. Depending on construction sites and water depth, transport and logistics are estimated to account for roughly 20 percent to 25 percent of the project costs—and 3PLs can expect to see lots of work coming their way in this area.

For example, the global freight management and logistics company Geodis Wilson is a major service provider for the wind energy sector and has experience in this area since 1997. Since wind energy has become a key market within its vertical strategy, the company established a specialist team for wind energy logistics within its industrial projects division.

Henrik Funk, global manager for wind energy projects at Geodis Wilson, sees a trend within wind energy as manufacturers and suppliers are more and more interested in full-service providers that have their own equipment. "This is where we see our advantage. Being part of the SNCF Geodis group, we are able to deliver solutions and services along the entire supply chain using all modes of transportation within a worldwide network," says Funk.

Informed sources also say Geodis Wilson plans to promote the European rail transport assets of its parent company SNCF to create new transport solutions for the wind energy sector.

One of the company's major global accounts is LM Wind Power for which it organized the transport of new LM wind turbine blades from China to Europe. Geodis Wilson's specialized Industrial Project division took over two 42 meter long blades from an LM production facility in China and shipped the blades to their final destination in Denmark—the longest, single cargo elements ever transported by air.

"The fact that we have an established network presence in both China and Denmark, along with a dedicated air charter division, on-site expertise, and technical support in this sector, certainly helped us to successfully manage this move," adds Philippe Somers, senior VP of Geodis Wilson Industrial Projects.

Ocean Cargo: Regulations ahead

Europe's ocean cargo industry faces turbulent seas, just like the rest of the global community. In addition to the burden of the overall economic development, they have to cope with new environmental regulations.

Based on the latest proposal from the European Commission (EC) in July, the ocean shipping industry has to reduce sulfur dioxide emissions by up to 90 percent, and fine particle emissions by up to 80 percent by 2015. The EC is expecting a benefit for public health between 15 billion and 34 billion euros, far exceeding the expected costs—which are in the range of 2.6 billion to 11 billion euros.

The proposed legislation revises the directive on the sulfur content of certain liquid fuels and incorporates new IMO standards into EU law to ensure their proper and harmonized enforcement by all EU Member States. Under the proposal, as of January 1, 2015, the maximum permissible sulfur content of maritime fuels used in sensitive areas such as the Baltic Sea, the North Sea, and the English Channel will fall from the previous level of 1.5 percent to 0.1 percent.

Ships will be allowed to use equivalent technologies such as exhaust gas cleaning systems as an alternative to using low sulfur fuels. Other changes proposed include more unified reporting and verification as well as sampling provisions aligned with international standards. The proposal is to be phased in from 2015 to 2020.

European ocean carriers, such as Hamburg Süd, have responded by investing in new technologies. Most of Hamburg Süd's new vessels, for example, are fitted with a novel common rail injection system or electronically regulated fuel valves. These new injection designs result in better combustion and subsequent fuel savings, especially in partial-load operation.

Exhaust emissions are therefore lower than with traditional propulsion engines. The most recently ordered ships of the "Santa" class, with a slot capacity of 7,000 TEU, will also be equipped with diesel generators for energy production using common rail injection.

In addition, the use of modern compressor technology in most of its fleet enables Hamburg Süd to operate extremely energy-saving reefer transport. And as one of the first shipping companies worldwide, Hamburg Süd has championed efficient scroll compressors since 1997.

In July of this year, Hamburg Süd was honored for its commitment to sustainability and the environment in the U.S. The San Pedro Bay Ports Clean Air Action Group, which is backed by the ports of Los Angeles and Long Beach, awarded the company its Air Quality Award. In the same month, the company also won the Gulf Guardian Award of the U.S. Environmental Protection Agency (EPA).

For Lufthansa, the first half of 2011 saw a capacity increase that came mainly from the MD11 cargo aircraft being reactivated following the recession.

Future developments?

Many EU carriers and service providers have become very careful about making any predictions about the outlook for coming economic developments. The debt crisis in several European countries and the U.S., as well as the ongoing turbulence on the finance market, is a major source of concern for the transportation and logistics sector.

Since many investments require long-term planning, the overall market is hoping for favorable developments and to see positive results for the year as a whole—stay tuned.

—Dagmar Trepins is a European Correspondent to Logistics Management

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