

Automotive
LOGISTICS

China conference



China's growing pains have to be addressed



Shanghai is the visible sign of the fast-heating Chinese economy, bursting with skyscrapers and housing, motorways and port developments; it is a city that shows all that should impress about China's economic boom. But there are dangers to the country's unchecked growth too.

During the Automotive Logistics China conference, which was held in Shanghai in April, discussions revealed an industry with growing pains that resemble the overcrowded and dangerous roads. Last year, automotive production increased by 27 per cent, but despite investments and a renewed focus on logistics, delegates warned that unless quality standards are improved along with non-road infrastructure, the industry – foreign and domestic – will suffer.

Zengrong Ma, Vice General Secretary, Automobile Logistics Association of the China Federation of Logistics and Purchasing (CFLP), estimates that a frightening 93 per cent of logistics providers in China do not meet regulations, and either overload carriers or use illegal truck sizes. Most of the companies, he said, are buffering the price of fines into their costs, as anything else would halt the industry. The conference revealed that Chinese and foreign manufacturers and LSPs

have a strong desire for the country to improve its approach to logistics as the market matures.

And it is a market and country showing phenomenal growth. Consultant David Diebold, CEO of David Diebold and Associates said: "More happens here in a year than in almost any other place on the planet, and on a much larger scale. Maybe I should say a month is a long time, or even a week."

The state of the industry

This is not the European market

Europe, particularly the western part of the continent, is a mature market with not much growth; LSPs, particularly those involved in finished vehicles, have to provide more technical and dynamic services to meet customer-driven demand. As was discussed at the AL Europe Conference in Montreux, carmakers have to change their production mindset, so that they build to order rather than stockpile cars that are later sold at a discount in an overcrowded market.

Overproduction in China is unlikely because demand

Quality standards need to be secured as the pace of growth in China's automotive industry gathers ever-greater momentum. **Christopher Ludwig** reports from this year's conference where delegates discussed everything from rail investment to returnable packaging and port infrastructure



Decision makers meet in Shanghai (clockwise from left): Anton Liu, Shanghai Yanfeng Johnson Controls Seating; Scarlett Dir General Motors; Peter Reinshagen, Gefco; Liu Guobin, FAW Lujie Logistics; Maxine Elkin, AL magazin; Deepak Sharma and Satkar Singh from Maruti Udyong; Henrik Wilhelmsmeyer, BMW Chi

continues to soar. "The centre of gravity in the automotive industry is shifting to Asia," said Bill Villalon, Vice President, Global Marketing and Product Development, APL Logistics. He noted that the Asian market was maturing with the increase in production for components and finished vehicles. "It's no coincidence that there is a rise in component manufacture and car production," he said. "The double digit growth in production of finished vehicles in Asia corresponds with outbound flows of component parts in the region. These trends are self reinforcing, and building up steam."

Villalon presented figures showing that Asia and other emerging markets continue to capture growth in the industry. "One scenario sees production growing from 65 million in 2006, to 76 million in 2014. BRIC countries [Brazil, Russia, India and China] will capture more than half of that growth, with China leading the way." He predicted that vehicle manufacturing within the BRIC countries will grow from 15 per cent now to 22 per cent by 2014, and the shrinkage will be most noticeable in North America.

According to CFLP data, China produced 7.28 million

vehicles in 2006 – the third biggest producer in the world – which showed an increase of 27 per cent on 2005 production figures. It produced 3.7 million passenger cars, reflecting a growth of 39 per cent. Sales grew 25 per cent to 7.21 million. Imports accounted for 227,773, while exports reached 343,379, an increase of 97 per cent.

Despite this, profits margins are slim and the industry remains highly fragmented. There are 117 OEMs, according to CFLP, and traditionally each has had its own logistics arm. "We have quite a lot of dedicated solutions in China," said Henrik Wilhelmsmeyer, Head of Sales Operations and Imports, BMW China Automotive Trading. "There are providers born of a particular OEM, and they are still focused on the manufacturer they have grown out of."

Too many middlemen

George Zhao, Director, Supply Chain Consulting, Schneider Enterprise Consultancy (Shanghai) said the problem with the Chinese business model is that there are many intermediaries. "The smaller players are each responsible for little areas," he said. "One company might perform the VMI, while



Delegates gather at the gala dinner



Safmarine prepares for its four cars-in-a-container demo



Zengrong Ma, Vice General Secretary, CFLP

another does JIT. In China we do not have many capable national carriers."

CFLP's Zengrong warned companies interested in doing business in China that profit would not come as quickly as growth. "For the first years, you should not focus or give priority to how much money you can make," he said. "It's more difficult to make a one Renminbi (RMB) profit in China than a one Euro profit in Europe. There is chaotic competition."

On the grapevine. . .

"There is a golden opportunity in China's logistics market and we would like to cooperate with you to create better scenarios"

Liu Guabin, FAW Lujie Logistics

"Logistics costs here are more expensive. The companies that address them first, will move ahead faster"

David Diebold, David Diebold & Associates (HK)

"For automakers in China to succeed they need not only get cars to the customer, but they must provide reliable spare parts and servicing support. But this is not easy to do because distribution and logistics are fragmented and beyond the control of the global players"

Ouyang Pu, Sinotrans

"The standards of the Chinese logistics market are not well developed. We are trying to formulate standards and in the future we would like to promote them"

Shen Jinjun, China Auto Logistics Association of CFLP

"Transport is not as expensive in China as in Europe or US in the short run. The efficiency gains in quality, handling, simplifying process, labelling, EDI etc, are often more significant than the savings we can do in transport"

Peter Reinshagen, Gefco

"Over the years, in the Chinese auto industry we didn't develop much in terms of logistics, but recently, with the increase of industry, logistics is on the rise"

Ouyang Jie, Dongfeng Motor Corporation

"We think more efficiencies can be gained in transit time and cost in China. This is driven by the use of road, the more expensive mode, in our experience. We've yet to get the synergies of rail and inter-coastal"

Robert Strain, GM

"From our perspective, if you look at the sheer number of manufacturers and their geography, marry that with the export and import demands, and then try to design a service network, no doubt we have challenges"

Richard Heintzelman, Wallenius Wilhelmsen Logistics

"We have quite a lot of dedicated solutions in China; providers borne out of a particular OEM, and they are still focused on the manufacturers they have grown out of. Others are not mature enough to set up a hub system that fulfils the need of various manufacturers"

Henrik Wilhemsmeier, BMW

The cost of poor packaging

Another aspect in the land of cheap labour and materials is that logistics costs can, and often do, outweigh the savings companies might make by sourcing goods from China. In that country, the logistics spend is 22 per cent of GDP, while in Europe and the US, it is less than 10 per cent.

Isaac Shemooly, Chief Operating Officer of Anji-TNT Automotive Logistics, told delegates that some of these higher costs were because of disorganised transport, a lack of freight consolidation, poor equipment and packaging, as well as a lack of visibility throughout the supply chain. "You could end up missing the ship from the port," he said.

Gefco's Peter Reinshagen, Coordination and Development Director for China, cited packaging as a critical issue for China, which, if addressed now, could prevent problems in future. "One-way packaging is still widely used, and there is limited use of standard logistics packaging, such as pallets.

"Without standardised trucks, the packaging material is often disorganised," he said. "The material ends up in a bad way as it is packed in cardboard and then placed on trucks in a haphazard way, which leads to damage." One solution is to standardise packaging and truck sizes, and to do so forcefully, before the industry develops further bad habits.

Returnable packaging as the way forward

Caroll Greene-Pickett, China Sourcing Office, MP&L Director, Ford Motor Research & Engineering, Nanjing Company Limited, said the carmaker had seen the light on standardised,



Peter Reinshagen said now is the time to elevate packaging standards in China

returnable packaging, and is piloting a programme where for the first time, parts would go directly to the line in returnable packaging provided by Orbis China.

"I never realised how important packaging was before I visited a few of our suppliers in China and saw our parts hanging out of cardboard boxes," she said. "If we're going to ship parts from China, costs will go through the ceiling because of this. So our packaging engineers designed robust packaging. Now we're looking at implementing our collapsible, returnable containers. This is going to be a breakthrough for Ford, and it is the right thing to do; we have sensitive parts, and do not want to have them repacked in China or North America."

Mark Flegm, General Manager of Orbis China, said that the savings for such packaging would be tremendous for the industry in China. He calculated that, over the five-year life of a returnable container, with a pack density of 60, manufacturers could save RMB3 (40 cents) per part. "That becomes a lot of money," he said. "When I worked for OEMs they told you to try to squeeze a cent out of every part."

Flegm suggested that the environmental impact was important as well, and predicted that in 10 years there would be very little wood available to the industry could ship around.

The CFLP has a committee working on defining such standards, but the first obstacle, in China as well as Europe, is OEMs' reluctance to standardise even in their own plants. Flegm said that the packaging "footprint" of a plant – the range of different materials used, including metal, wire baskets and wood – could vary by 50 per cent. "Suppliers ship what they have available to them, and the standardisation process has to be simultaneous," he told delegates. "It's going to be a tough, long haul."

Standardisation is a massive task

Robert Strain, Director of Logistics, GM Asia Pacific Supply Chain, was not optimistic about standardisation, particularly at government level. He noted that degrees of variation even in regulated sea containers could be dramatic "If you're off by millimetres you won't maximise your containers," he said. "Defining the standard is difficult. When we find what we think is perfect, the shipping company often has something a bit different, and that may impede us from reaching our standard, which for GM is 85 per cent on a liquid-fill basis."

"To say that there would be one standard automotive pallet is difficult. Part packaging is specific to the product that you're building and each platform requires different packaging. We're open to sharing standards, but to have these regulated at governmental or provincial level would limit the potential."

Another major obstacle is that China still lacks standard truck sizes. Without a standard truck size, the hope of standardising packaging is small. Strain acknowledged that setting standards for trucks as well as loading would be beneficial to the industry. "With set truck standards our 3PLs could build more efficient load plans. That is where they offer their true service," he told delegates.

Transport costs overall are higher

Collaboration could solve logistics problems

Despite overall low transport costs in China, it also costs more



Beijing Jiaotong University Professor Xiadong Zhang said that capacity for cargo by rail will increase five times in the next decade

than the West. "In terms of unit cost, transport and logistics is as competitive or more than anywhere in the world," Zhao said. "But a lack of scale of economy, as well as inefficiency, particularly with backhauls, cause higher costs." In China, on average, nearly 50 per cent of vehicles return from deliveries with empty backhauls. In the US, it is 10 per cent.

The vastness of China, a lack of rail infrastructure and the sprawling locations of OEMs are major factors, and it is a problem for inbound as well as outbound logistics. "From the perspective of a carrier, if you look at the sheer number of manufacturers and their geography, marry that with the export and import demands, and then try to design a service network, no doubt we have challenges," said Richard Heintzelman, President: Region Asia, Wallenius Wilhelmsen Logistics.

The solution, heard round the world, is collaboration, which is as much a problem to orchestrate in China as it is in other countries. The nature of the traditional industry, with each OEM controlling its own LSP, did not encourage cooperation. According to CFLP's Zengrong, manufacturers wanted companies to transport only their own cars, with their own logos. But necessity has forced changes and for the past two years there has been more collaboration.

"There is little warehousing," said Zengrong, "all the OEMs still ask the LSPs to set up dedicated warehouses, which is very expensive." Debate over who should instigate collaboration – the OEMs or the LSPs – was the same in China as it was in Europe: both thought the other should initiate it. Strain reminded delegates that the 3PLs are the catalyst to entice collaboration.

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Automotive Logistics magazine and conferences are a very valuable source of information, a catalyst for new ideas, a bridge to new markets and a very efficient means of communication. Why has it been so successful in these years? Highly professional and extremely nice people, a very strong sense of customer service and anticipation of customer needs combined with a deep knowledge of the industry and its driving forces. I would like to wish Automotive Logistics magazine and Conferences Happy Birthday and a even brighter future as 'the' forum of our industry

Peter
Reinshagen, China
Project Manager,
Gefco

Rail not seeing the investments that roads are

The country's size is comparable to the USA, and would surely benefit from using rail to cover vast distances as is done in North America. But in 2006, the CFLP maintains, only seven per cent of finished vehicles were moved by rail, with more than 80 per cent being transported by road. The efficiency and benefit of rail was acknowledged by all, but those working in China underlined the fact that the infrastructure is not sufficient, costs are too high, and the government is not investing as much money it does in the road network.

The extensive motorway programme is being quickly developed and Zhao says that the infrastructure is developing well ahead of available trucks and assets. More than 85,000 kilometres will be laid by 2020, and the motorways already rank as second longest in the world after the USA. Rail, which is being deregulated at a slower pace, has been less of a priority.

"Rail is not as cheap as sea, but it is cheaper than road transport, though not always as efficient in covering shorter distances," Zhao said. "There are rail companies that are operating with success, but not for bulky items."

But if delegates are to be believed, this mode of transport will develop. "The Chinese rail infrastructure has no capacity," said Villalon, and added that, "the reverse is that the government is to invest \$250 billion."

Professor Xiadong Zhang, of the Institute of Modern Logistics at the School of Traffic and Transportation, Beijing Jiaotong University, revealed details of recent research that the university had conducted, which shows that China is committed to rail. Improvements are being made to increase the capacity of container movement via rail. Capacity now reaches only a third of demand, but this will rise by 12 per cent because cargo speed is set to increase to 160 kilometres per hour. By 2020 there will be 32,000 kilometres worth of more tracks, with dedicated cargo lines in the more advanced regions. "We expect that in the next decade, capacity for cargo will increase three to five times," he said.

Ro-ro shortage

Facilities need to be upgraded

China has an impressive track record regarding container port development, evident most in Shanghai with the Yanshan

deep-sea port. Five years ago, this facility was a small fishing island off the mainland, and is now connected by a 32 kilometre bridge. It has helped Shanghai surpass Hong Kong as the second largest container port in the world. By 2010, Shanghai will have 30 berths with a capacity of 10 million TEUs. A pressing issue for finished vehicle logistics, however, is ro-ro capacity, as there is a shortage of carriers across the globe. And China's accelerating economy is placing huge pressure on capacity.

"Ro-ro capacity is the major factor that we are focusing on in Asia Pacific," said Strain. He added that the so-called cross trades – new shipping flows of global trade – are especially challenging.

The traditional movement of goods from east to west has been disrupted with the emergence of north to south movements within the Americas, within Asia, as well as exports out of Europe to South Africa. Freight rates have hit highs because of rising bunker prices, a lack of vessels, and port delays because of congestion and a lack of facilities.

The problem, as Strain acknowledged, is that shipyards do not give priority to ro-ro vessels, as they are less profitable to build. This point was emphasised by NYK Europe President Svein Steimler during the AL Europe conference in March. One solution is to have greater investment in shipping equipment, including short sea. But Strain does not see OEMs or carriers going it alone. "We promote cooperation with government bodies, ro-ro and port management companies to construct facilities," he said. "We are confident they will be used not only by GM but other OEMs in China too."

He told delegates that GM is now at the point of being constrained, and may soon have to limit exports from some markets in Asia to make room for others. This could be particularly important as the company assesses if it will export cars from China in the near future. For now, GM focuses on the domestic market, and has four dedicated import facilities for parts. Additionally, it has made investments for exports from China. "Export doesn't have the same government requirements as import," he said. "There will be tremendous export opportunity out of China."

WWL's Heintzelman said that the company is investing to address the shortage. Wallenius Lines, WWL's parent company, will build more than 40 PCTCs in the next five years, and will continue its programme to extend the capacity of current PCTCs from 6,500 units to 8,000.

He feels however, that if ports are going to cope with the volumes, the answer lies in the industry taking a more European form: rather than adding numerous new carriers, there will be more "added value" at ports and other facilities.

As the market matures, it is demanding more sophisticated services, and 3PLs must respond. "It is critical that as the industry evolves, the importation of value added services becomes a necessity," he said. "There is a dynamic in regard to supply chain pushing everyone here to make sure that their product, whether it's a service, whether it's a port value proposition or even from a carrier side, the type of support we offer is keeping up with that demand on the supply side."

He saw that technical work by 3PLs is not required in China as much as it is in Europe or North America, but with the market due to expand, the customer of tomorrow will have different needs. Build-to-order and late-stage customisation



Delegates exchange views during a lunch sponsored by Gefco

of cars will require more skills in ports and distribution centres. "Traditionally in China, all the work has been done in the factory. But over time, it will be important for the industry to come together and make sure that the right investments are made in the right ports."

Ouyang Jie, Vice President of Dongfeng Motor added: "Automotive logistics is developing from its traditional fragmented shape to a modern industry. As risk and cost increase in China, lean management is becoming more critical."

Golden opportunities exist in China

Liu Guobin, Vice General Manager, FAW Lujie Logistics, looked forward to collaboration with foreign LSPs and manufacturers for service integration and better service for subsidiaries. "There is a golden opportunity in China's logistics market," he said.

Dongfeng's Ouyang described how the company has cooperated with Nissan, Honda and Volvo to improve logistics management and processes. "We set up a supply chain management department, responsible for business planning and logistics management, with a logistics benchmark system," he said. "Since we started the benchmarks have increased efficiency. Through technical communication we hope to develop a team of professionals," he said. "We need to work together with automotive logistics companies, as more logistics business is being outsourced to 3PLs or 4PLs. What we need are those LSPs with strong

technical capabilities and expertise that can offer a complete service."

As the industry consolidates and becomes more efficient, LSPs in China, while still largely married to an OEM now, will move toward independent 3PL models that offer a range of services. Liu said that his company, the logistics arm of FAW, is looking to expand its network to do more work for companies other than its parent and subsidiaries.

Although sophistication and modernisation is underway, the conference revealed that China must simply manage its supply chain better. There is still little true outsourcing in the industry today, according to Zhao. Empty loads, damages, poor quality and an over-reliance on road transport characterise the industry. There is also progress to be made in warehouses and hubs. BMW's Wilhelmsmeyer demonstrated how BMW cut its distances to dealers by using strategic hubs, and also by making use of three ports rather than one. Distances to dealer were reduced 60 per cent in just two years.

The speed of change is still ahead of logistics processes. Roads are paved, but there is a shortage of reliable trucks to use them. Railways roll out without wagons. The need for technical work is coming, and yet there are still problems with the basic transport from one point to another. Parts production is growing, but the counterfeit market threatens the supply chain at every turn. The successful company in China will keep in mind that he must go slowly as often as he goes fast. ●●●



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