

AUTOLOGISTICS
Global

**THE BEST
CONFERENCE
QUOTES**

"This year is probably the most challenging year that I can remember to be in the supply chain. We have experienced wildly fluctuating demand, and it is difficult to do good forecasting where the market is so consumer driven"
- **Gregory Smith, Volkswagen**



"There is no collaboration across the entire network and that is something that we definitely need to look into. However, I think that Mexico would be a good place to start on a smaller scale than looking at the entire US since you have limited your railroad and limited your ports"
- **Jim Terry, DaimlerChrysler**



"We have to change the way that we do things today in order to make our customers more productive. It is not about rates; it is about what the costs drivers are and how we can help them be more efficient"
- **Bill Garrett, UPS Logistics**



"In a lot of cases, our customers see distribution and logistics as a core competence and a competitive advantage. I think you are going to have a difficult time convincing these companies that turning it over to a third party will be in their best interest"
- **Tom Swennes, ICL Systems**



"Logistics as a competitive advantage has come a long way, but I would say that we still have a long way to go... We need a new, more meaningful relationship between manufacturers and carriers"
- **Chris Connor, WWL**



Carmakers face up to finished vehicle challenges



One of the main questions facing North American vehicle manufacturers is how best to achieve order-to-delivery goals.

Jim Terry, senior manager, vehicle logistics at DaimlerChrysler, said: "Quality is number one. Second is speed of communication, which speaks to improving technology and information flow back to the OEM. Third is speed of delivery to market. Fourth is costs; prices are rising – gas is outrageous."

Gregory Smith, executive director, distribution and logistics at Volkswagen of America, said that 2004 has been particularly challenging. "One reason is the change from building out a 2004 model where we shipped almost nothing from our ports to a ten-fold demand increase in wholesale now," he said.

"The bar has been raised for customer expectations. Customers want quality, but they also want a deal. A couple of years ago we established a system in which the dealer can go online in order to find their vehicle location. The challenge is in giving the dealer the estimated time of arrival. We are right about 85% of the time, which is not enough. The inaccuracies are due to a breakdown in the production system or in the truck or rail

system. Truck carriers keep their commitments about 60% of the time and rail carriers keep it 0% of the time.

"In the cost area, we have to do everything we can. We have optimized the supply chain in many little islands: carrier rates, port processes and so on. We need to look at the whole supply chain and at ways to do handoffs better. It will take more collaboration in order to give carriers a lot more advanced information.

"Right now, we are taking at least one month's worth of supply out of our pipeline. We are going to try to get our dealers to live with 35-40 days' supply of cars on the ground. We do not want to have any cars in our ports."

VIN win situation

An area of potential collaboration among vehicle manufacturers is exports from Mexico to the US and Canada. Terry said that currently DaimlerChrysler is short of ships, which delays the time for transporting from Mexico and up the east coast. "However, that represents no more delay than what they experience from rail at this time," he said.

DaimlerChrysler is fighting to procure railcars, particularly bi-level ones. Terry said that what would help on the rail side is

pricing per vehicle. "We should get away from railcar pricing where everyone buys one railcar and that is what we pay. With a per-VIN system, we could start mixing. The railroad would charge each OEM its own rate, so there would be no collaboration. However, I could certainly use Volkswagen to fill my ram trucks on a railcar and increase the density of that railcar."

Volkswagen also uses vessels to ship from Mexico north along the US east coast. "Rail is not too bad. The biggest issue in Mexico is that the Port of Veracruz is hugely congested," said Smith. Bill Kerrigan, director of consulting firm KGI asked whether since there is little terminal space for vehicles at Veracruz, there may be collaboration among the OEMs to build covered parking decks, which would also provide weather protection.

Bob Barnard, manager of international and domestic vehicle logistics at Mercedes-Benz, said that with its next major product launch, volumes would increase substantially. "About 60-70% of our volume is imports. To that end, one of our biggest challenges is developing port property. Water property is not in abundance, especially with docks that can handle ships with 38ft or more draft. Also at issue is getting

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"The railroads need to look at capitalization, but as manufacturers, we do not help ourselves when our forecasts are optimistic... We need to get our forecasts accurate, stand behind them and hold the railroads to account"
- **Bob Barnard, Mercedes-Benz**



"Our industry needs a distribution system that responds to the market. We have to work through capacity issues collectively as an industry and we can only solve them as an industry in most cases"
- **Ricky Coley, Ford**



"They key thing about a 4PL is that it is a very attractive, economical little term; it does seem to give a bigger indication that the market is demanding more capabilities, but it is not well-defined... I think that the market currently wants 3.3PLs or maybe 3.21PLs"
- **James Moore, Ryder**



"We do not allow room to turn over our whole logistics function to outside companies; that would be like turning over our production floor to an outside company. However, our logistics partners are very important to us. We give each one a business segment, each of which is a big piece of our whole production system"
- **Glenn Uminger, Toyota**



"There is more in common among Ford, GM and Chrysler on our inbound supply base than there is with the original equipment side of our own business"
- **Ron West, General Motors**

Autologistics Global 2004 conference coverage by Anthony Coia and Dale Buss

competitive rail into those ports. "Vessel lines are scrambling to grab space and since Mercedes-Benz owns its entire vehicle processing centers, we need to find a solution to work with carriers, and other parties."

Paul Carlton, president, Mitsui OSK Bulk Shipping (USA) said: "When it comes to the land issue at ports, it is really an import, not an export issue. Manufacturers use the most land in the northeast, Florida and California. Due to container pressures, cars have fallen out of favor in the north-east, and more are being railed up from South Atlantic ports."

Parking in North America

Parking decks, already in use in Europe, may become more widely used in North America. Barnard said that, historically,

land has been much cheaper than parking deck construction. "With parking decks, you need columns to support the structure and, unfortunately, they become bumper magnets. We may have to look at cost savings for 20 years hence, and parking decks will probably play some role."

How viable is the land bridge option for vehicle manufacturers? Vessels have to return to the Far East, so they have to go that way anyway. Barnard said: "We are looking at using land bridge at the end of this month and next month, primarily due to the labor shortage on the west coast. Vessels are sitting for three to five days at the dock with no dockworkers to unload them. We need to follow our timelines, so vehicles will probably have to go on land bridge. Railroads are not

competitive and probably never will be, not through any fault of theirs. Land bridge from Europe does not seem to be a long-term option for the US. For us, reliability is essential."

The globalization of the supply chain is important to Ricky Coley, manager, North American vehicle logistics for Ford. "We are integrating our affiliated groups, such as the PAG, into the North American supply chain and making sure that that we recognize the synergies. The first stage was the port rationalization process. With PAG, Volvo was using one port, Jaguar another, and so on, which was inefficient. The second stage involves processing fees, land availability, efficient port processing operations and multiple production lines versus single ones," he said.

CAR CARRIER CAPACITY SHORTAGE WILL CONTINUE

Christopher Connor, president of the Americas region at Wallenius Wilhelmsen, said that there is still not enough supply in the global ocean car carrier fleet, despite a sharp increase of more than 30% since 1997.

"The Asia-Europe trade exploded in 2004 and we expect it to continue to grow rapidly over the next two years. Overall, we expect a steady increase in demand on average of 6% growth over the next couple of years.

"The carrier base is challenged due to the fragmentation of

production. We are sourcing cars from many more markets, including Korea, Brazil, Argentina and Australia. In addition, cars are 10% bigger on average in the past decade. Our solution has been in part to convert some container vessels, improving capitalization in the short term."

Paul Carlton president, Mitsui OSK Bulk Shipping (USA) agreed that there is a tight tonnage situation. He noted that US imports have grown from 4.1 million units in 1995 to 6.5 million this year. "The industry

will add car capacity of 750,000 units over the next several years," he said. "What is hurting the carrier side is the strong utilization of these vessels. We are seeing an explosion in demand in countries such as Brazil, South Africa, Argentina, Turkey and Mexico. All demand the same level of service and quality, which places a lot of pressure on the carriers. We must look at everything on a global basis when it comes to supplying tonnage to the car market. Vessels will move to where there is a better paying market."

3PLS PROMINENT IN AUTO SECTOR, BUT SERVICE DISAPPOINTS

A study on third-party logistics recently released by Capgemini, the Georgia Institute of Technology and FedEx showed that the automotive industry is slightly above other industries in its use of 3PL providers, with almost 81% of respondents indicating that they use 3PLs.

Gary Allen, North American distribution leader at Capgemini, said that the automotive industry's

use of 3PLs for inbound transportation is much higher than for other industries. In a reflection of growing trends in information technology, the use of 3PLs for RFID technology came out much higher for automotive than it did for any other industry, with 23% using them now and 43% planning to use them in the future, according to Allen.

Dr John Langley, professor of

supply chain management at the Georgia Institute of Technology, said that most respondents view 3PLs as tactical service providers as opposed to supply chain integrators or logistics strategists, although the latter two categories are increasing over time. On the negative side, about 49% of respondents said that 3PLs did not meet their service level or cost reduction expectations.



AIR CARGO BID FOR STRATEGIC RELATIONSHIP FALLS ON DEAF EARS

Brandon Siow of Singapore Airlines Cargo dropped in on the conference's first day to scope out the possibilities for expanding his company's performance of air freight runs for OEMs and logistics services providers. "We're thinking that there might be more demand for this as supply chains lengthen," said the global account manager.

But what Siow heard might have confused him more than enlightened him. Essentially, it was a version of the old saw about spouses: "Air freight: you can't live with it; but you can't live without it."

Autologistics managers are happy to have air freight available in an emergency, to help avoid costly assembly line shutdowns in the wake of some sort of failure or in an unexpected shipment and to facilitate quick delivery of aftermarket parts.

"You always assume the product you get is going to meet your quality standards all the time," said Grant Belanger, executive director of MP&L for Ford. "You build in some buffer stocks, but if you find a hidden defect in your buffer stock, you'd better find a 747 pretty damn quick."

Toyota has an optimum

standard of 96% and 98% of service parts being on hand at a warehouse and available for next-day delivery. "But 2-4% of the time I'm going to have to fly the part from Point A to Point B," admitted Tony Minyon, national logistics manager for Toyota Motor Sales USA.

Siow's theory is that airlines can expand into a much more regular, less contingent, role in automotive logistics. "This is



Tony Minyon, national logistics manager for Toyota Motor Sales USA

especially the case as more manufacturers move their production to less developed countries with poorer transportation networks," he said. "Airlines definitely will be

needed on a regular basis to fulfill JIT requirements."

Or, perhaps, where shippers can't afford the cost of holding inventory across long sea voyages, Siow suggested, "then they might opt for the much quicker transit times offered by airlines." And as more vehicles make use of more electronic components, "airlines might have a role here as well in ferrying the electronics that might be shock sensitive and might not endure the long sea voyages," he added.

But from comments sprinkled throughout several sessions, it was clear executives regard air freight as a last, distasteful, inordinately expensive resort. No one seems to want to make a habit of putting their parts on airplanes.

That was evident, for example, when Bas van Goch, a senior account manager for KLM Cargo, noted that GM and Ford make some regular shipments by air. "How can we play a structural role?" he asked.

Respondents gave him little hope. "Airlines usually only play a role in an emergency because of the cost factor," answered Ron West, GM's general director of global operations for service and parts. "At the end of



Grant Belanger, executive director of MP&L for Ford

the day, all of us will use the airlines to keep customers on the road... There are still opportunities to improve our ability to forecast and predict, but we need to take that variability out. We're working every day, honestly, to tune it up so we're truly using you only for emergencies."

Frederiek Toney, director of global parts supply and logistics for Ford's Customer Service Division, added that his company's "effort is to reduce the most expensive transportation costs, and clearly air fits in that category. Our whole design is to put the most material on the ground because it's lower cost and it also reduces handling and damage."

SPEED, RESPONSIVENESS AND RELIABILITY KEY TO SUPPLY CHAINS

Audi's Herman Krog, Mopar's Doug Zopfi and G-Log's Greg Slawson told the first session of the conference that one of their biggest challenges is to respond to marketplace pressures to continually increase the speed, responsiveness and reliability of their operations.

Much of the available improvement, each of the men said, could come from bringing logistics considerations to the table much sooner than traditionally. "OEMs have started to model supply chains

more and have built more flexibility into their supply chains early on," said Slawson, "but I still think a tremendous opportunity is earlier engagement of logistics services providers."

Audi's Krog said it was "important for logistics planning activities to start very early in projects such as simultaneous engineering. Service parts operations, especially, "often have a Rodney Dangerfield complex because sourcing decisions are

often made without consideration for us," said Zopfi, director of parts operations for Chrysler's Mopar aftermarket parts unit.

"We need to be part of the process, way up front to make sure from the beginning that the aftersales facet is incorporated into that [logistics] planning. We need better modeling tools to understand the supply chain implications, but our main job is to get involved early and speak our voice."



Greg Slawson, vice president of automotive solutions, G-Log

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GLOBALIZATION LEAVES CARMAKERS TO GRAPPLE WITH TRANSPORTATION TIMES

As the ties proliferate between suppliers around the world and OEMs located in the western world, the logistical webs they're creating are an increasingly important part of the industry's overall competitive equation. And unfortunately, it's also becoming easier for sourcing and supply chain arrangements to get snared in one of the webs.

David Hodgson, vice president of worldwide supply for DaimlerChrysler, told the conference: "The challenges we're facing with globalization include understanding long order-to-delivery times and transportation times over long distances." Supplier partnerships and vehicles



David Hodgson, vice president of worldwide supply for DaimlerChrysler

location were also included, as was the complexity of transportation systems, especially in emerging markets.

Grant Belanger, executive director of MP&L for Ford said: "We're looking around the globe for opportunities to

improve cost positions without sacrificing other critical elements of quality and delivery. Lots of discussions center around China, but it's not the only location."

Belanger ticked off a list of other sites that may not have the glitz of China these days but which offer strong sourcing possibilities including Thailand, the Philippines, Brazil, Mexico and eastern Europe.

When he was reminded by an audience member that a Ford executive at last year's Autologistics Global conference had predicted that Ford eventually would source \$10bn in parts from China,

Belanger backed off a bit on behalf of the company. "The real issue is leveraging all emerging markets," he said. "The nuance that has changed is that we're not just looking at China. We're looking at other markets as well where there is similar growth potential and the possibility for expanded market share."

Hodgson said that DaimlerChrysler increasingly takes the approach of whether a sourcing move abroad "is a good net decision" cost-wise. "Sometimes the purchasing people rush to source something for the piece price, but the landed cost is much higher," he said.

EXECUTIVES SLOW TO WAKE UP TO THE POTENTIAL OF PACKAGING SAVINGS

Packaging and container executives and managers are convinced that they can and should assume a more central role in improving the application of inbound automotive logistics. And they've got plenty of ideas for doing so, as well as some examples of how they work. But they also concede that theirs is a bit of a quixotic pursuit even today and that it's still difficult for them to get a place at the table when it comes to a meaningful role in streamlining the supply chain.

One theme, for example, was the lack of corporate attention to getting a handle on the plethora of empty containers that seem to be floating around throughout many companies' manufacturing networks.

"Part of it is it is the lack of big-time awareness inside companies" about the potential contributions they could make, said Charlie Fischer, director of business development for Modern Engineering, a Michigan-based company involved in packaging engineering. "Some people understand that empty containers are just as important as the ones with parts in them: where the containers are now, and planning return routes and loading them to come back," Fischer said. "But understanding is just slow in coming. Training and awareness about how many millions of dollars are lost to this is just now coming."

In the first split session on

the conference's second day, Fischer was joined by Jayson Pankin, new-venture creation specialist for Delphi Technologies; Steve Tripp, senior manager of materials handling engineering for DaimlerChrysler; and Bret Carlson, director of engineering services for Orbis.

Tripp echoed the perception that efforts to rein in empty-container costs lacked the concern of many corporate executives that it should command. "I'm not sure we've found any magic bullet yet," he said. "We did try a 3PL to manage our containers, but after a year or so of trying that process, we deemed that it couldn't be a success, and we walked away from it.

"Containers have never

gotten the attention that parts do. There's a lot of discipline in the system to make sure parts are where they're supposed to be; we haven't put that kind of discipline into containers yet. Should we? It's arguable. But we haven't found a way to do it cost-effectively yet."



Steve Tripp, senior manager of Materials Handling Engineering for DaimlerChrysler

INDUSTRY YET TO TUNE IN TO THE BENEFITS OF RFID TECHNOLOGY

At the very end of the conference a panelist asked audience members how many of them could say that their companies were actively working on Radio Frequency Identification (RFID) programs. Barely a hand went up.

Automotive applications represent 46% of the total global RFID market today, says ABI Research, and it the industry is poised to spend another \$600 million in the next few years on spreading new generations of RFID. But it

was clear that it will be a while before RFID supplants barcode technology.

Penske Logistics, for example, is hedging its bets. So far, no automotive OEM or any other customer has required Penske to assemble an RFID

network. Yet Vince Hartnett is preparing his company for a dramatic change with a five-person RFID task force that is evaluating tags, readers and other equipment and searching for a suitable spot within Penske to run a pilot.



SERVICE PARTS ORGANIZATIONS DRIVEN BY CUSTOMER LOYALTY GOAL

Service parts executives are getting motivated with regard to taking costs and time out of the supply chain and have an appetite for more improvement.

“Our primary purpose is to support sales,” said Tony Minyon, national logistics manager for Toyota Motor Sales. “If a customer has a good experience at a dealership, they’re more likely to come back. They talk about their experience and their friend’s experience, and it gets around.”

Ron West, general director of global operations for GM’s service and parts division, echoed Minyon: “The higher loyalty you have, the better your sales. Loyalty is made up of availability, the ease of doing business [together]. There’s a strong correlation to higher sales.”

David Vieira, senior vice president, Exel painted a complete picture of the logistics

challenge in the service parts arena. Retailers in the aftermarket are losing sales, Vieira noted, even while investing heavily in improving their infrastructure to service customers. For example, with the recent proliferation of new-vehicle models, the number of parts to track and the number of parts considered obsolescent are multiplying exponentially. At the same time, dealers are being asked to hold onto these reserved products for 15 years now instead of the previous 10, sticking them with more inventory and more quickly obsolescent merchandise.

“Complexity is driving it across the entire network, and it’s fairly dramatic,” Vieira told the session. “Retailers are losing sales, but fewer specific parts are readily available from wholesale distributors because of parts proliferation overall. There is margin erosion from

larger back-room inventory requirements and more frequent store deliveries. There’s also a lot of pressure on wholesalers and retailers to be able to maintain parts for over-the-counter sales.”

Their neck of the industry is paying a lot of consideration these days to ways to combine



David Vieira, senior vice president, automotive, Exel

the service parts and manufactured parts supply chains, and the panelists discussed progress in that area

to date. “We’ve tried to identify the synergies between the two but their needs are so different,” said Ford’s Frederiek Toney. There’s not a whole lot of opportunity for linking the two.” In fact, Ford’s studies, showed that less than 10% of the material in both supply streams overlapped the other, even for inbound items. “And on the outbound side, there is a focus on the finished unit that is completely different from what we do on the service side,” he said.

West said that “it’s hard for us to get excited” about such possibilities. “There is more in common among Ford and GM and Chrysler on our inbound supply base than there is with the original equipment side.”

For the most part, suppliers are different between service and production parts operations, and so are third-party packagers.

SLOW MOVING SERVICE PARTS CHALLENGE FOR CATERPILLAR

The advance of IT is in large part responsible for the wonders of today’s supply chain management. But seldom does it enable a logistics operation to do things as spectacular, and in as many places, as Caterpillar’s far-flung logistics network.

Krish Srinivasan, senior manager of the strategic-services division of Caterpillar’s logistics services unit, wowed the conference’s final session with the tale of how his operation manages to get parts quickly to highly time- and cost-sensitive operations around the world.

With sales of more than \$24bn a year and shipment of more than seven million tons of equipment annually, to nearly 200 countries, Caterpillar creates its own demand for often heroic logistics to service its heavy machinery and diesel, natural



Krish Srinivasan, senior manager, Strategic Services Division, CAT Logistics

gas and industrial engines. This equipment often represents high-value durable goods working in time-sensitive, critical environments, Srinivasan explained.

He said more than 75% of Caterpillar’s service parts will sell fewer than 12 times a year somewhere in the world. Meanwhile, the typical automotive company has 40% to 45% of its service parts selling fewer than 12 times a

year. The number of service parts shipped, he said, has about doubled over the past 10 years, to about 500,000 annually nowadays, most of them in very slow-moving parts. “The expectations are for 99.7% system fill for service parts, with same-day shipment for any one of 300,000 possible parts,” Srinivasan said. Such demands created a “monster” of a problem for Caterpillar’s logistics services, making it a separate business unit within Caterpillar that “gets priority and attention.” Since 1987, in fact, [it] has offered its own expertise to other companies.

At Caterpillar the logistics operation addressed the company’s service-parts challenges by reducing the inventories of service parts from 11 months of supply down to just five months, from one turn a year to two turns a

year. “Our performance is the equivalent of six turns a year in the auto industry,” he said.

“The challenge has been to find inventory-management technology and supply-chain capabilities that will allow us to be very efficient despite being in a slow-moving business,” Srinivasan said. In that regard, Caterpillar’s technology has been key. It emphasizes 10 differentiators, including real-time execution and alerts, robust connectivity, and being global as well as highly reliable.

Another key is a high degree of centralization of Caterpillar’s IT logistics. “We go for an emphasis on centralized inventory control and processing,” he said. “That way, service parts requests from dealers in Asia and everywhere else are all processed by a computer in Moline, Illinois.”