

Automotive LOGISTICS

Central Europe conference

Russia - potential with problems

One fact is beyond dispute: carmakers from around the globe have Russia firmly in their sights. An under-developed market that offers huge potential is too big an opportunity for companies who are struggling to maintain market share and profits in the mature car-buying regions of the world to miss. But having made the decision to move East and to take on the vagaries of the Russian economy – a fledgling democracy that still bears the marks of its Communist past – and an infrastructure that is wanting, the hard work is yet to come.

This was one of the conclusions reached at this year's *Automotive Logistics* Central Europe conference, which was held in St Petersburg, Russia in June for the first time. (*Automotive Logistics* has initiated an *Automotive Logistics* Russia conference for 2007. See www.automotive-logistics-russia.com for more information.)

The Russian market explained

Location, location, location

The choice of where to locate production sites in Russia is a difficult one. Conventional wisdom would have pointed to the south-central region of Nizhny Novgorod because it is the heartland of the Russian car manufacturing industry and has the biggest potential for growth.

Weighed against this is the proximity of St Petersburg to the Baltic Sea ports and Western Europe – a crucial aspect for carmakers for whom costs are always top of mind. Ford and GM already have plants in the St Petersburg area, and before the decade is out Toyota and Nissan (and perhaps Renault and Peugeot) will join them. Work on Toyota's site started in June 2005. Production is due to start in 2007. Production at Nissan's new plant is scheduled to start in 2009.



During the Automotive Logistics Central and Eastern Europe conference held in St Petersburg at the end of June, the vastness of the country was only supplanted by the countless opportunities this region offers. But, as **Mark Venables** reports, the hard work is still to come

RUSSIA BY THE NUMBERS

Growth by region

Moscow/St Petersburg			
2005	140,000 cars	2010	300,000 cars
Growth	140%		

Rest of Russia			
2005	60,000 cars	2010	260,000 cars
Growth	330%		

50 million cars by 2025

2005	21m vehicles	2025	75m vehicles
New vehicles required			54m

Who buys what?

2005 – 1.2m cars			
Russian brands	80%	960,000 cars	
Foreign brands	20%	240,000 cars	
2010 – 5.4m			
Russian brands	60%	3.25m cars	
Foreign brands	40%	2.15m cars	

Parts and components

Aftermarket parts	
2006	\$5.2 billion
2008	\$5.7 billion
2010	\$6.2 billion

When the projected \$10 billion annual spend on production parts projected for 2010 is added, the parts market in Russia will be worth \$16.2 billion by 2010

Share of motor industry in country's GDP

Mexico	2.8%	Korea	2.5%
Russia	2%	Japan	2%
USA	1.1%	Brazil	0.8%
China	0.8%	India	0.5%

Russian wages growth

2002	29%
2003	10%
2004	10%
2005	10%



Left to right: Anthony Claeys, Toyota Motor Europe (TME); Marina Osovskaya, Severstal Auto; Vladimir Molchanov, St Petersburg Port; Alexey Tenkov, GM CIS; Oleg Gusikhin, Ford Motor Company; Peter Szabados, GM SE Europe; Patricio Neffa, Renault in Russia; Peter Fonyodi, Toyota Motor Europe (TME)



Egor Svensitsky from Russian LSP, GEMA



NYK's Phil O'Reilly; BLG's Bernd Kupke



Toyota's Emin Atac; Gefco's Sebastien Clermont

On the grapevine. . .

"From a customs perspective, we have had no real problems importing cars. We have a custom clearance agent that seems to be able to do what we want them to do." *Darren Chaisty, Nissan Europe*

"Our plant will not be built for a few years, but I see some concerns. Initially all the plants in the west of Russia, while the Russian parts market is fairly immature, will be sourcing their parts from the current market in central Russia. Inevitably that means pressure will be on the capacity and infrastructure in the St Petersburg area." *Martin Corner, Section Manager, Nissan F&SS*

"I think the problem is not a lack of collaboration . . . the problem is really the lack of capacity. The situation is rather severe this year. I am still waiting to hear how the Russian trucking market is going to keep pace with the rapid growth in vehicle production." *Peter Fonyodi, Vehicle Logistics Group, Toyota Motor Europe*

"If we are looking at the lack of capacity, we need to look at new distribution channels. Make more use of railway deliveries. We have our own railway terminal. It will be a big challenge for us to incorporate this railway network." *Anna Vorobieva, General Manager, GEMA*

"For us it is very important to implement just-in-time logistics, but in Western Europe, to some extent, and definitely in Russia, it is more difficult. We have to compromise. But the most important thing is that we can plan logistics and that the plan will be respected." *Yuji Tomokiyo, Coordinator, Parts and Logistics Management, Toyota Motor Europe*

"I would expect our logistics partners to understand the Toyota way and the Toyota standard. We expect our logistics partner to listen to us and believe us. Even if it needs to be just-in-case in Russia, we still believe that we can do just-in-time. We understand and respect the situation here in Russia, but in the long term we should add some value in Russia by providing just-in-time logistic partners. That is why we are chasing long-term partners in Russia, who have Russian experience – because we don't know anything about Russia. Our philosophy is continuous improvement so we need to undertake some kaizen activities for our partners." *Emin Atac, Senior Manager, Purchasing Division, Toyota Motor Europe*

How vast is Russia's potential? According to Hanns Günther Bollig, Managing Partner of Automotive Advisors and Associates, who gave the opening address, hardly ever has a country made it so easy to project the future development of the automotive industry. "If we map the relationship between passenger car penetration in various countries and the income and productivity of the people, there is a clear correlation between the two factors across the world," Bollig explained.

Russia's car market potential is vast

"Russia is just at the beginning with one car per seven people, while the West stands at about two people per one car, so there is clear potential for growth." When the number of cars being registered is considered – a clear indicator of the speed of development – and sales of second-hand car sales are included, Russia is growing quickly compared with most other countries. "We can really say that in the next 15 to 20 years, Russia will have reached its maximum density of vehicles, providing that current growth rates of between six and eight per cent per year prevail," he continued.

Growth will occur east of the Urals

The brain (St Petersburg) and heart (Moscow) of Russia have been leading the way. These regions have already achieved higher car penetration per population figures, which is no surprise. It is forecast that much of the growth will actually not take place there, but somewhere east of the Ural mountains, in cities scattered across Russia.

"Over the next five years Moscow and St Petersburg will increase car sales by 140 per cent while the rest of Russia will increase by 330 per cent," Bollig predicted. "This means that the future centre of gravity of Russian car sales will move away from Moscow and St Petersburg and towards the centre of the country, towards Nizhny Novgorod, which is the purse of Russia and the home of the indigenous automotive manufacturing sector."

New car market set to explode

"We can compare the Russian automotive business with that in Germany, France and Denmark. There are 75 million vehicles in these three countries and only 21 million vehicles in use in Russia, but in the next 15 to 20 years, it will match this number. Potentially this means that 50 million vehicles will be sold in that region over that time. This is a significant number," he told delegates.

Currently 1.2 million cars are sold in Russia each year ▶



NYK Logistics' Hidekazu Kotake; TME's Peter Fonyodi



Olaf Metzger, Revival Express and Vitaly Brazhkin, Peugeot



Delegates participated in the Q and A session

and 80 per cent are Russian brands (Moskvich, GAZ, IZH, UAZ, VAZ and Zil). The remainder are foreign cars and it is predicted that this figure will double to 40 per cent. That does not mean that the Russian automotive industry will suffer – much of the growth will be in foreign brands, but Russian brands will continue to grow by about five per cent a year.

Parts market is worth billions

The finished vehicle business is set to boom, as is the parts and components market. This growth will create a parts and components market of \$10 billion. There is also a rapidly growing aftermarket sector that, it is predicted, will grow to \$6.2 billion by 2010. “This will include about 65 per cent original parts, but 24 per cent will be grey imports or reverse engineered parts and 11 per cent is likely to be original OE parts,” Bollig added. “This is a challenge to the vehicle manufacturers and OEMs, to get that market in order. To conquer the Russian market, the aftermarket needs much greater attention than it has received. The volumes of production parts and aftermarket parts we already have mean \$16.2 billion in annual sales.”

The trial-and-error period

European OEMs have focused their attention on the western region of Russia, mainly because of logistical reasons. Many of these vehicles will take 50 per cent or more of their components from Europe, much of that shipped via Finland, and the proximity to Western Europe lends itself to locations in the St Petersburg and Moscow regions.

“The Russian automotive market is going through a rapid trial and error phase,” Bollig explained. “There is a largely uneducated customer base in Russia that has no brand loyalty at all. I believe that successful automotive business in Russia means more than setting up CKD plants across the border. CKD plants are inflexible and are slow. They are set up for tax benefits but offer no real service benefits to the market and I believe that Russia deserves a true partnership approach in global automotive development, working together with the European and Asian industries.”

The logistics infrastructure

The importance of the Port of St Petersburg

The importance of St Petersburg as a port cannot be denied, but there is debate about its ability to cope with the rapidly expanding automotive market. Almost the whole of the European part of Russia – 95 million people or 65 per cent

“Over the next five years Moscow and St Petersburg will increase car sales by 140 per cent while the rest of Russia will increase by 330 per cent”
– Dr Hanns Günther Bollig



of the total population – is supplied with imported goods from the port.

With foreign carmakers almost universally opting for St Petersburg as a location for new plants, the focus shifts to the region’s port and its associated infrastructure. Andrei Karpov, Head of the Committee on Transport-Transit Policy, City Government of St Petersburg, conceded that the port struggles to cope with demand now and loses trade to both Finland and other Baltic Sea ports.

“The city does not have the capacity to handle all the cargo, that is why some is switched to the Baltic ports and Finland,” he said. “The volume of container cargo in the Baltic which is subsequently shipped to Russia was 1.8m TEU. St Petersburg handled 63 per cent, while the Baltic ports and Finland handled the rest,” Karpov elaborated.

Losing potential revenue

“This is why the city loses potential income of \$1.2 billion a year. There is a shortage of specialised terminals to handle ro-ro cargo and new imported cars. This is why these high-income cargos are handled at neighbouring ports. Russia imports 566,000 new and used cars costing over \$5.6 billion, and 70 per cent of new cars shipped to Russia are delivered to the ports of Finland and then delivered by trucks. Each car brings at least €100 to our Finnish partners for transportation and logistics. This means that Russia loses \$500m a year,” Karpov told delegates.

There are ambitious plans to extend the port, improve access roadways and build a number of Category A warehouses. The Russian government is expected to rubber stamp these plans later this year. The problem, and a major concern to carmakers, is that there is no clear timetable of when this work will be started. “We do not have a specific timetable because agreements for the new plants to be built in St Petersburg were only finalised recently,” Karpov explained.

Warehouse facilities to be expanded

“We made a serious assessment of the warehouses at the



The Finished Vehicle Logistics session, Day 1



GM CIS' Alexey Tenkov and GM SE Europe's Peter Szabados



The gala dinner at the Marble Palace

“These are exactly the same problems that you face everywhere. The constraints might differ from market to market but the way we address them are very similar”
 – **Oleg Gusikhin, Ford**



terminals. There aren't many Category A warehouses, and the plan that we will submit to the Government in September will include proposals to develop the warehouse facilities in the port. We have provided for areas that will only be used for warehouses and terminals – the land will not be used for anything else. We hope to attract investors either through private/public partnerships or direct investment.”

Despite these apparent shortcomings, Karpov stressed that the city's logistics infrastructure is a key selling point in convincing carmakers to opt for that region. “We think the appearance of big carmakers is related to the fact that St Petersburg is a port city,” he said. “The companies that have decided to make cars in Russia took that factor into account, that transportation costs would be diminished because St Petersburg has a powerful transport system. We are committed to removing cargos such as coal and minerals and handling scrap metal from the city, and to use those areas freed up for containers and spare parts and parts that are destined for the carmakers' plants. The desire is to replace environmentally unfriendly products with hi-tech cargos,” Karpov elaborated.

Customs headaches

No discussion about the difficulties of doing business in Russia would be complete without a brief mention of the lengthy and complex customs procedure. Nissan, which has been importing cars for five years, reiterated that the problems are minor if a competent Russian customs agent is used. “It is true that customs clearance procedures in Russia are complex, but unfortunately this situation can only be improved at a federal level and the regional government does not have a say,” Karpov explained.

The Russian supply chain

Logistics problems are universal

One person with a wealth of experience in designing and implementing supply chains is Oleg Gusikhin, Technical Leader: Supply Chain at Ford Motor Company. Although he

Case study: Toyota Motor Europe

“Just-in-case” could be the new just-in-time

Toyota, the champions of lean manufacturing and just-in-time production, is the latest of the established carmakers to take the plunge into the burgeoning Russian domestic market.

The company's first Russian facility, to be located in St Petersburg's Shushary district, will have an initial annual production capacity of approximately 50,000 units. It will initially produce 20,000 Camrys – a mainstream seller in Russia – each year.

The plant is scheduled to start operating in December 2007. Last year in Russia, Toyota sold 47,000 vehicles through Toyota Motor (TMR), the company's Moscow-based sales company, and other trading companies. Other models sold include the Corolla, Avensis, Camry, RAV4 and the Land Cruiser 100, as well as Lexus-brand vehicles.

The challenges of setting up a logistics network

As part of its preparation for next year's opening Toyota sent five logistics and manufacturing experts from its Brussels office to the St Petersburg conference, among them Emin Atac, Senior Manager, Purchasing Division, Toyota Motor Europe.

“Setting up a logistics network will be more challenging than it is in the European Union,” Atac said. “We examined many potential risks such as difficulties at customs and tax regulations; different truck sizes; poor road infrastructure; port congestion risk; and just-in-case rather than just-in-time that we need to consider in our advance strategies.”

One key lesson that the company learned was that it should extend existing logistics partnerships for its new venture. “It will be better to use our EU logistics partners who have started having reasonable experiences in the Russian market,” he said.

“Our main objective at the conference was to learn about the logistics environment in Russia, but we actually returned with more questions, which is positive,” he added. Atac maintains this will give TME an idea which criteria should be considered at the beginning of our logistics network set-up.”

How the Japanese manufacturer copes with the vagaries of the Russian market will make a fascinating tale. Faced with extended and inefficient supply chains, an infrastructure that can best be described as “creaking”, a supplier base not yet mature to quickly benefit from Toyota's nurturing and the real possibility of having to organise inbound logistics on the Russian variant of JIT – Just-in-Case – may all be an anathema to Toyota. These are the facts that all carmakers in Russia must contend with, at least for now.



TME's Emin Atac and Yugi Tomokiyo; Renault's Patricio Neffa



Severstal's Marina Osovskaia puts questions to the speaker panel



Ford's Oleg Gusikhin

is based in Detroit, he is a native of St Petersburg. Gusikhin conceded that there are many aspects that are specific to the Russian market, but said there are also many similarities with other markets, especially as regards constraints, capacity and geography.

"These are exactly the same problems that you face everywhere. The constraints might differ from market to market but the way we address them is very similar," he said. "When we build the design of the supply chain, there are a lot of factors that have to be taken into account. We have to find a trade-off between cost, inventory and lead time. There are many geographic constraints, and I think the Russian market is more similar to the North American market than Europe. Also when we design a supply chain we have to make sure that we provide the proper interface to marketing, sales and manufacturing," Gusikhin continued.

He cited the North American production network that includes vehicles imported from Canada, Mexico and Europe for all Ford brands – Volvo, Jaguar, Aston Martin and Mazda. "The way our plant logistics networks are organised is unique, because GM and Chrysler don't use this type of organisation. We use four mixing centres that are all operated by rail. Ford vehicles from different plants and factories are received at these centres, where personnel mix the railcars for different destinations. These then go to different destination ramps, where the vehicles are unloaded from the rail and shipped, using trucks, to the dealers.

Similarities between North America and Russia

"In North America, because of distances, rail would be the primary mode of transportation and that's why I can see a similarity to Russian markets, as this is the case in Russia as well." Based on his experience, Gusikhin said that there are a few critical success factors for designing a successful supply chain and these remain constant wherever in the world it is to be implemented. Partnering with experts in certain aspects of the supply chain network – distribution, logistics or manufacturing – is an factor, as is supply chain information visibility.

"The complexity of the supply chain is amplified by globalisation and in this sense, I would like to view the Russian market as not having its own specific supply chain, but being part of the global supply chain, which is characterised by the same issues as everywhere else," he told delegates. "I really believe that successful design of the supply chain can only be done through partnership with companies who have expertise in certain areas," he concluded. ●●●

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Growth sparks debate over capacity

The huge growth prospects in Russia come at a cost, and a potentially damaging one at that.

A finished vehicle logistics infrastructure that is creaking under the strain of distributing over a million cars a year will soon be expected to handle five times that number, and in a more cost-effective and timely manner than is the case now.

There is general consensus about the poor infrastructure of roads, railways and ports, a severe shortage of trucks and a lack of logistics expertise in Russia. One logistics company that does have extensive experience in the Russian finished car market is Gema. Igor Svetsitsky, the company's Deputy General Director, conceded that all logistics companies face countless problems in Russia.

Infrastructure is a growing concern

The three main problems, according to him, are the location of distribution channels, infrastructure, and the irregularity of demand and supply growth. "Russia is like a continent on its own, so we have to accept that we will have long run routes. The route from Finland, which is used to bring in most of the imported cars, can be up to 3,500km. Roads in St Petersburg and Moscow are quite satisfactory, but I can't say the same for the regional roads," Svetsitsky said.

There is also a chronic shortage of capacity in every facet of the transportation mix. "Furthermore, there are no storage centres in the regions – we have plans to build some but for now, they are only plans," he added.

He highlighted the growth in car production – this is not being matched by investment in logistics resources. "Since 2000, the annual increase has been more than 30 per cent, and we estimate it could be 100 per cent growth a year soon when Nissan and Toyota enter the market. Russian companies are also setting up some production capacity to manufacture foreign cars," Svetsitsky added. ▶



Stefan Beckers, Ford Russia



Dr Hanns Günther Bollig



TME's Yuji Tomokiyo

The increase in quantity and the raised expectations of the dealers are cause for concern too. "It is hard to satisfy the growth needs of the market; five years ago, the only aim of dealers was to sell cars. Now they want to sell cars and offer additional services, closer to the European version of car trade," he explained.

Satisfying the growing demands of the market

One of the companies that will face this logistics uncertainty is Nissan, due to start production at its St Petersburg plant in 2009. "We are opening a new plant in Russia in 2009, but we have been delivering cars to the Russian market for the past five years," Darren Chaisty of Nissan Europe explained. "Volumes have grown from low thousands initially, to 60,000 cars this year and beyond.

"When we go into a new market, we assess the suppliers there, look at where the product will be sold, and then try to design internally what we think will be the right way of getting vehicles to the market.

Then we go out to the supplier base and hope to achieve our quality, cost and delivery targets. We try and learn from each one as we go," Chaisty explained.

Nissan is still in the research phase now, but the parameters have already been set. "We are in early discussions with our suppliers, and are talking to other suppliers about the best way to distribute vehicles. What we should do at some point is talk to the other OEMs in Russia and see if there are ways in which we can collaborate, but at the moment we have no plans to do that," he told delegates.

Addressing the investment burden

When it comes to overcoming the hurdles, the logistics companies and OEM have different point of view. Chaisty said that logistics suppliers should invest themselves, while Svetsitsky called on OEMs to shoulder their share of the burden.

"The car manufacturers or importers should invest in

the logistics process – through trucks, compounds or infrastructure – and then let this infrastructure be managed by the experts, the logistics companies," Svetsitsky said. "They can also sign long-term contracts with logistics suppliers.

The tendency in the Russian market is to sign one-year contracts. It is important for logistics companies to have a stable contract so that they can invest money in infrastructure. In the case where the car manufacturer signs a five-year contract, the logistics company can invest," he said.

Taking responsibility for infrastructure improvement

"All the discussions that we have had with our current supplier are about increasing capacity so that we do not have to rely on sub-contractors," Chaisty told delegates.

"Unfortunately it is almost a Catch-22 discussion. They need commitment from us as the OEM to get the finance to make their own investment.

"It is frustrating that the industry does not want to develop itself, invest its own money, build the infrastructure

for Russia so that there is no reliance on the carmaker, but that seems to be the message that we get, that OEMs need to give something before an investment is made. It is not always easy to do, especially in the long-term, because we are looking for cost reductions going forward; suppliers wanting four or five-year contracts to make investment in trucks is not what we are looking for," Chaisty added.

A long-term strategy is needed

He continued, "The market in Russia is exploding and there are a lot of smaller truck owners, who own one or two trucks, who are happily making a lot of money quickly. That is okay for now, but it makes it difficult to plan for the future. A view of the longer term is what is required, because ultimately, OEMs will say 'this isn't any way to run a business' and they will start imposing pressure and turn it to what we do want. So take a long-term view, is the advice." ●●●

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– Darren Chaisty, Nissan Europe
