

KINGS OF THE ROAD

Monster Trucks Come to Germany

By Christian Wüst

Will 60-ton tractor-trailers soon be roaring down the German autobahn? These extra-long "gigaliners" could reduce truck congestion and save gas, but are controversial -- especially with advocates of rail transport.



DPA

German roads could soon see an invasion of gigaliners.

Thomas Sommer is a lucky man. He's one of the few Germans licensed to drive the new generation of freight vehicles, 25-meter-long monster trucks known as "gigaliners." The 44-year-old truck driver works for Cotrans, a shipping company based in the northern German city of Wolfsburg, and is currently testing one of the first few gigaliners on German roads. Sommer insists that he hasn't inflicted a single scratch on the truck since the trial began in July 2006, adding that he is "a little proud" of that.

Three of these giant gigaliners, which at 25.25 meters (83 feet) are 6.5 meters (21 feet) longer than a conventional tractor-trailer, are currently involved in a one-year trial throughout Lower Saxony, the first German state to politically support the new generation of trucks. Three other German states, North Rhine-Westphalia, Baden-Württemberg and Bremen, have followed suit and are now also conducting similar trial runs.

There is a sense of political urgency behind such programs. Germany's roads are choking in truck traffic, and its famed autobahns sometimes resemble little more than vast truck parking lots. According to government estimates, truck traffic on the country's roads will have increased by almost 70 percent by 2015, compared to 1997. No one knows where all these new trucks are supposed to go.

The gigaliner could prove a godsend for Germany's clogged highways. With a cargo volume of 150 cubic meters (5,357 cubic feet), it can carry about 50 percent more goods than the largest conventional tractor-trailer. For Cotrans CEO Herbert Hausherr, the math is easy: "I'll be able to replace three tractor-trailers with two," he says. Fewer tractor-trailers would also mean that the surface area of roads would be used more efficiently.

And these behemoths hardly cost more than a standard tractor-trailer, neither to operate nor buy. Gigaliners consist of the same components as a conventional tractor-trailer, except that an additional trailer has been added.

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The gigaliner will be unbeatable in terms of operating costs, because it hardly uses more diesel fuel than the current, shorter models. Only during acceleration does the additional load make the truck's engine less fuel-efficient. But in long-distance transport, where trucks generally maintain a constant speed, this hardly makes a difference. According to Cotrans, the test truck consumes 28 to 33 liters (8.7 gallons) of diesel every 100 kilometers, which is not that different from conventional trucks' fuel consumption.

During the trial year, the extra-long tractor-trailer, loaded with Volkswagen parts, makes the daily round trip between the automaker's plants in the cities of Wolfsburg and Emden. According to Hausherr, the gigaliner's higher cargo volume will save 71,000 truck kilometers and, as a result,

at least 20,000 liters of diesel.

With these kinds of numbers, Europe's logistics sector could easily follow the example of the Australian system, where giant trucks with multiple trailers routinely roar through the outback. Tractor-trailers like giga-liners have already been used in Sweden and Finland for years.

But can these kinds of countries serve as models for Central Europe? As far back as October 2004, the Free Democratic Party's (FDP) parliamentary group in the German Bundestag submitted draft legislation that would ban the use of larger and heavier tractor-trailers in a nationwide trial. But the legislation became bogged down in the Transportation Committee.

Instead, the government commissioned a study from Germany's Federal Highway Research Institute (BAST) to analyze the issue from a purely theoretical perspective. The study has since been submitted to the Federal Ministry of Transport and is scheduled to be published in its entirety in February. Based on the parts of the report the government has already disclosed, the general tone is negative, however.

The BAST performed its analysis on the basis of a total weight of 60 tons per vehicle instead of the 40 tons currently allowed. According to the study, the current infrastructure is not designed to support such heavy loads. Bridges would have to be "reinforced or gradually replaced." And the current guide rails would not be capable of withstanding the impact of such vehicles. The outcome of accidents would be "significantly more serious," the report says.

This sounds like a pretty strong argument against the German logistic industry's plans for giga-liners. However, the BAST's verdict oddly contradicts the opinions of the Dutch transportation ministry, which are based not only on purely theoretical analyses but also on a real-life trial.

Tractor-trailers with a total length of 25.25 meters and 60 tons of allowable gross weight have been driven on the Netherlands' roads for years in a large-scale experiment. The vehicles, of which 162 are already in use, are called "Longer and Heavier Vehicle Combinations" (LHVs) in the Netherlands.

The Dutch transportation ministry produced an interim assessment in November 2005. According to the report, "there is no reason to assume that an LHV has a higher safety risk compared with a regular vehicle combination." On the contrary, the ministry concluded, "Since LHVs reduce (mileage driven), ... traffic safety can increase."

The dangers of greater weight are apparently more theoretical. This is because volume is usually what limits cargo weight in normal shipping practice. According to the Dutch transportation ministry, the LHVs are usually not heavier than 36 tons, cargo included. For this reason, the currently allowed maximum gross weight of 40 tons did not even need to be increased in the Lower Saxony trial.

Cotrans CEO Hausherr is already arguing for a "first step," in which only the larger vehicle types would be allowed and gross weight could be limited to about 44 tons. This is already the maximum gross weight for all trucks that currently operate in conjunction with railroads in the transshipment system.

But there are other hurdles to large-scale use of the long tractor-trailers. Their use on two-lane highways would make passing virtually impossible.

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And other infrastructure is not always suitable for such monsters. "Highway rest stops and many freight terminals are not at all designed for such vehicles," complains Klaus Peter Röskes, Vice President of the Federal Association of Freight Transportation, Logistics and Waste Disposal (BGL). The test drivers of the first models are currently parking in the few spaces normally reserved for extra-long freight vehicles, which cannot



be a permanent solution. A fundamental redesign of rest stops would be necessary to complete a major shift to ginaliners, which, according to the Dutch transport ministry, could replace up to 31 percent of all conventional long-distance trucks.

But would such a development really ease congestion on the roads? Or could a boom in these super-trucks actually divert rail freight into the road-based system?

Kombiverkehr, a subsidiary of Deutsche Bahn, is already apprehensive about the new competition. Its business model involves reloading tractor-trailer loads onto trains at suitable terminals, thereby making rail transport more attractive for customers without rail access. But the company still transports less than one twentieth of the volume being shipped by road, although annual growth rates of about 10 percent suggest that interest is growing.

But the ginaliner, says Kombiverkehr CEO Armin Riedl, could crush his company's fledgling business. Riedl hired economists from Mannheim-based consultancy TIM Consult to analyze the competition the new ginaliners would present. According to TIM Consult, the new ginaliners would reduce trucking costs by 20 to 25 percent and shift more than half of current combined road/rail freight entirely to the roads.

Germany's truck lobby is having a tough time finding arguments to disprove such predictions, especially now that the trials are already confirming the trend. The Cotrans ginaliner carries side panels for VW's compact van, the Touran, from Emden to Wolfsburg. In the past these panels were transported by rail.

Translated from the German by Christopher Sultan

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