

Driverless vehicles go manual in Moscow

August 24 2010, By COLLEEN BARRY , Associated Press Writer



This Thursday, July 15, 2010 a technician controls an unmanned electric-powered vehicle by a remote device, in Parma, Italy. A pair of fender-benders, two technology-loving hitchhikers and 22 hours blocked at the Russian border. That's the balance sheet one month into the three-month journey for a team of driverless vehicles on a 13,000-kilometer (8000-mile) road trip from Europe to China. "We were trapped in customs for one long day. We had a small accident, well two small accidents, caused by human error. As far as the technology is concerned, everything has been smooth. We are very happy," project leader Alberto Broggi said Tuesday, Aug. 24, 2010. (AP Photo/Antonio Calanni, file)

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team of driverless vehicles on a 13,000-kilometer (8,000-mile) roadtrip from Europe to China.

A group of Italian engineers from the University of Parma's Vislab are testing sensory technology that allow unmanned vehicles to avoid obstacles on the longest-ever roadtrip of driverless technology.

One month into the three-month journey, most errors have been human.

"We were trapped in customs for one long day. We had a small accident - well, two small accidents, caused by human error. As far as the technology is concerned, everything has been smooth. We are very happy," project leader Alberto Broggi said Tuesday.

The first accident occurred a couple of days into Russia, when the group stopped for the day and got out of the vehicles. One team of engineers turned off the sensory equipment, but neglected to switch off the automatic driving mechanism.

"So it was able to steer and drive, but it had no perception. It couldn't see anything," said Broggi, who is monitoring the journey and troubleshooting from Parma. The vehicle drove right into the rear of another driverless van parked three meters (yards) away.

"The second accident is even more stupid than the first," Broggi said. One of the battery-powered vehicles, was being loaded on to a truck to be recharged, and it banged into a truck, taking off a bumper.

The Italian scooter and vehicle maker Piaggio, which owns the four driverless vehicles, is sending spare bumpers, Broggi said. And now the team has a check list to make sure all systems are off when they stop for a break.

Vislab's goal is to log 13,000 driverless kilometers (8,000 miles) by the time the convoy arrives in Shanghai on Oct 28, for a final demonstration at the World Expo. So far, the vehicles have logged 2,300 autonomous kilometers (1,400 miles) of the total 4,100 kilometers (2,500 miles) traveled by the convoy to date, the balance in tow.

Still, Broggi is optimistic they will make up the mileage on the zigzagging route through Asia.

The departure from Italy was delayed by logistics, so the vehicles were towed to Belgrade. Then the team got stuck on the Russian border for 22 hours waiting for proper authorization to bring the vehicles into the country - not because of concerns over the unmanned technology but for proof of vehicle ownership, Broggi said.

To make up the time, the vehicles were towed again.

And Moscow drivers, it turns out, are not ready to share the roads with autonomous vehicles - so the automatic driving mechanism had to be turned off.

For the journey, the driverless vehicles travel in pairs, with the driverless vehicle taking cues from a lead van being driven normally. But in Moscow, drivers cut in between the vehicles, blocking the signal, and the unmanned vans' impulse to stay within the traffic lines was futile given the chaotic driving patterns, Broggi said.

"It was impossible. In crowded areas, if no one is respecting the rules, there is no way to navigate. The only thing you can do is avoid hitting someone," Broggi said. Yet, he would not rule out autonomous vehicles in chaotic situations in the future: the rules for the driverless vehicles would just have to be rewritten to match the environment.

The convoy has been logging roughly 200 to 230 kilometers (143 miles) a day, and was somewhere between Niznij Novogorod and Saratov on Tuesday, two days after leaving Moscow where a pair of enterprising hitchhikers flagged them down with a banner endorsing future technology. They got a short 15-minute ride for their effort.

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