

Expertise: Digital Solutions, Product Development

Industries: Logistics, Mobility

Born to Drive – when the car takes the first step





Overview of the partnership

- Partners:** Consat Engineering, Volvo Cars, and other members of VICTA (Vehicle ICT Arena).
- Objective:** To demonstrate how today's vehicles, using existing technology, can automate the journey from production line to parking space – entirely without a driver.

Born to Drive is a research and innovation project demonstrating that newly manufactured vehicles can drive themselves from the production line to a parking area – without a driver and without new hardware. By using the technology already present in today's cars, Consat, together with several actors in the automotive industry, has developed and demonstrated a practical solution for automated internal transport.

Challenge

Internal transport of newly built vehicles is costly, manual, and inefficient.

Solution

With existing vehicle technology and a traffic management system, the car was able to drive itself to the designated location – without a driver and without additional hardware.

Born to Drive was carried out by Consat Engineering in collaboration with Volvo Cars and other members of the VICTA network. The aim was to explore how standard production vehicles can be used for autonomous transport within factory premises. Using RTK GPS, software control, and a prototype traffic management system, a test vehicle was able to drive autonomously along predefined routes – without a driver or additional hardware.

A pragmatic partner

The idea was developed at Consat by Lars-Göran Ullenius and Martin Wahlgren, and refined in collaboration with companies such as Semcon, Combitech, Actia, and Volvo Cars. Consat Embedded Design was responsible for the early planning and architecture. In the next phase, Consat Telematics developed the traffic management system that controlled the vehicle's movements.

“We wanted to show that there's no need for futuristic solutions to automate transport from the line to the parking lot. Today's technology and smart software are enough.”

Martin Wahlgren, CEO at Consat

The challenge

Each newly produced car is typically driven around 25 times before reaching the end customer – often manually within the factory area. This is time-consuming, labour-intensive, and costly. At the same time, modern vehicles already have the technology required to drive autonomously in clearly defined areas.



Key outcomes

- Autonomous driving using existing technology and RTK GPS
- Reduced manual vehicle handling
- Lower costs and reduced wear and tear
- Increased precision in logistics flows
- Demonstrated at ITS World Congress in Montreal

Summary

- Born to Drive highlights the value of rethinking the ordinary – and the power of collaboration.
- Consat has shown that newly manufactured vehicles can operate autonomously within the factory using only existing systems.
- The project opens the door to significant logistical savings and has received attention in both the media and international forums.
- The vehicle was controlled via a prototype traffic management system and navigated autonomously using RTK GPS and onboard systems.

The solution

By combining existing in-vehicle technology with a prototype traffic management system developed by Consat Telematics, the vehicle – in this case a Volvo XC90 – was able to exit the production line, follow a set route, and park at the correct location, entirely without a driver. The system relied on RTK GPS for centimetre-level precision and software control via Actia hardware.

The result

Born to Drive demonstrated that autonomous driving within factory areas is feasible using today's vehicle technology. The solution is based on systems already present in modern vehicles and does not require extra hardware. Replacing manual transport also reduces wear on the vehicles.

Value-driven innovations

The project shows how a simple software update can unlock major efficiency gains – without investment in new hardware. The traffic management system developed by Consat, while simplified for demonstration purposes, has already inspired further development for applications such as yard management in bus depots.

Contact us

Want to know how we can help you automate, digitalise, or improve logistics in your production? Contact us today – we'd love to tell you more or book a meeting.