



HERE partners with Bosch and one of the world's largest commercial vehicle manufacturers to make truck driving more efficient and sustainable

- *HERE ADAS Map, which powers Daimler Truck's Predictive Powertrain Control (PPC), a cruise control and transmission control system for commercial vehicles, delivers highly precise information about the road ahead to automatically determine the most efficient driving style.*
- *UniMap, HERE's new map-making capability, leverages multiple types of data sources including car sensors, to ensure map freshness and quality.*
- *PPC helps to lower the energy consumption of both combustion engine-powered and electric commercial vehicles.*

CES 2024, Las Vegas - HERE Technologies, the leading location data and technology platform, today announced its collaboration with Bosch and Daimler Truck AG on an advanced driver assistance system (ADAS) technology for commercial vehicles that automatically determines the most efficient driving style, helping to reduce driver stress, energy consumption, and CO₂ emissions.

Daimler Truck's Predictive Powertrain Control (PPC) is a cruise control and transmission control system for commercial vehicles. Powered by the HERE ADAS Map and Bosch's Electronic horizon software, the system takes into account roadway topography, curvature, slope, intersections, traffic signs, speed limits (including truck-specific regulations) and driving rules. By seamlessly integrating this



information, the vehicle system minimizes unnecessary braking, accelerating, and gear shifting to optimize driver comfort and fuel and battery consumption.

PPC in action: How does the system work?

The HERE ADAS Map links the precise position of a truck on the road to define an Electronic horizon for which the driving style is then automatically adapted to. The HERE ADAS Map delivers the vehicle system information to plan and time gear shifts in advance as well as to predictively adjust the speed of the vehicle.

The system works on motorways and on inter-urban roads as well. For commercial vehicles with combustion engines, it leads to an overall fuel reduction of up to 5%, which in return lowers CO₂ emissions. For electric commercial vehicles, it significantly improves the energy efficiency, resulting in a longer range.

The PPC system can also be directly connected to the on-board navigation system as shown in the newly introduced eActros 600. In this case, the system takes into account the planned route calculated by the navigation system to facilitate a better recognition of the situation on the road ahead.

This is enabled by [UniMap](#), HERE's next-generation map-making capability. UniMap aligns all standard definition (SD), high-definition (HD) and ADAS map data into one single, semantically consistent digital representation of the world. Through this, the PPC system can easily match waypoints from the navigation to the ADAS map it uses.

Leveraging artificial intelligence (AI), UniMap automates the processing of vast amounts of data from multiple sources, including car sensors, connected devices, satellites, and Light Detection and Ranging (LiDAR). Changes detected in the physical reality thus become part of the map within 24 hours, ensuring map freshness and quality.

“Together with our partners Daimler Truck and HERE, Bosch attaches a great importance on the quality and the reliability of the Electronic horizon”, said Dirk



Paetzold, Head of Commercial Vehicles - Cockpit Technologies at Bosch.

“The system was intensively tested, before its market launch, and will always be kept up to date in the future. Bosch continues to develop the Electronic horizon being available for ten years. In the future, the function will check whether the information stored on the map corresponds to the actual conditions on the road.”

“Collaboration is essential when it comes to achieving societal sustainability goals. Our work with Bosch and Daimler Truck on Predictive Powertrain Control is a great example of that, with partners combining their individual expertise to create a solution with real-world impact today”, said Leen Balcaen, Vice President Product Management SD and HD Maps at HERE Technologies. “Predictive Powertrain Control not only helps to substantially reduce fuel consumption and lower CO₂ emissions, but also create a safer and stress-free driving experience.”

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About HERE Technologies

HERE has been a pioneer in mapping and location technology for almost 40 years. Today, the HERE location platform is recognized as the most complete in the industry, powering location-based products, services and custom maps for organizations and enterprises across the globe. From autonomous driving and seamless logistics to new mobility experiences, HERE allows its partners and customers to innovate while retaining control over their data and safeguarding privacy. Find out how HERE is moving the world forward at [here.com](https://www.here.com).