Airbus and ZF to Develop High-precision End-to-end Autonomous Driving Solution

Airbus Defence and Space and ZF Friedrichshafen AG, a system provider for mobility, are collaborating to enrich and complement ZF's on-board system to enhance autonomous driving by using Airbus satellite-derived information. Under this collaboration, Airbus and ZF are combining their capabilities and expertise to offer a reliable end-to-end solution for self-driving and self-positioning vehicles.

To answer the extreme level of accuracy required, Airbus provides its unique high-precision ground control points (GCPs), calculated using radar satellite imagery, to support the fusion of ZF sensor data such as Lidar and Radar. In addition, the GCPs serve as independent data source to improve and validate the accuracy of mobile mapping data.

Furthermore Airbus investigates generation of High Definition maps (HD maps) based on aerial and space borne approach, to complement ZF semantic cards. HD Maps are key to ensure the guiding route, as they build an important link between mobile mapping data and global positioning systems. They contain more information than just the road itself, as lanes, the radius of curves, lane widths, street signs, bridges, and buildings, as well as their distance from one another. Both remote sensed information GCPs and HD maps will be integrated as foundation layers into the “ZF AD Environment” – an enhanced HD maps solution ZF will present soon – where all needed information for autonomous driving will be implemented in a cloud based system.

Autonomous driving is a new, enthusing and challenging market for Airbus, as the highest level of autonomy requires the highest maps precision.

https://www.gim-international.com/content/news/airbus-and-zf-to-develop-high-precise-end-to-end-autonomous-driving-solution