The automotive landscape, passenger cars as well as trucks, is facing big changes due to the increased use of Advanced Driving Assistance Systems. DAF is faced with many challenges in this respect and one of these is the fact that a reliable and robust perception of the road environment around the vehicle is crucial for the development of fully autonomous trucks.

This project gave insight into the challenges related to defining and developing an Environment Model based on the signals supplied by several individual sensors. An Environment Model was designed, by means of sensor synergy and sensor data fusion, which resulted in a functional proof-of-concept on a prototype vehicle.

Results
A functional prototype that can provide several ADAS functions with important environment information has been created. The employed sensor fusion algorithm combines information coming from several sensors and increases the completeness in the environment perception. The designed Environment Model has proven successful in providing essential environment information to enable the functionality of the Traffic Jam Assist function. Demonstrating the functionality of the Environment Model is a kick-start towards the realization of more sophisticated ADAS functions in the future. For customers this means more safety, comfort and efficiency.