

HarmonizeDD

Integration of automated and conventional vehicles

Deployment of innovative services by heterogeneous Communications- & Cloud systems



HarmonizeDD
AUTOMATISIERT UND VERNETZT
IM URBANEN MISCHVERKEHR

Project description

The project HarmonizeDD is developing an innovative overall system to support automated and conventional vehicles in urban areas. This system contributes to avoid interactive parasitic error and the mismatch of information. The system consists of a mobile communications-cloud for a comprehensive provision of basis-services, a roadside-unit-cloud with additional functionalities on specific routes as well as extended functions for automated driving and new assistance systems for conventional vehicles, which will increase and improve the interaction in mixed traffic.

This opens up possibilities to develop innovative rudiments for the integration of automated vehicles into the traffic flow, since these vehicles implicate higher requirements to the communication-system.

Contribution Preh Car Connect

Preh Car Connect develops assistance functions and an HMI for the driver of non-automated-networked-vehicles. The concept developed for this will be evaluated with the help of the Chair of General Psychology & Industrial Psychology (TU Chemnitz) and presented to potential users in a test-study. Using this concept there is the possibility to integrate the system with these specific information and technology into the vehicle: for existing vehicles with an Head-Up-Display from Noritel and for a new vehicles with an integrated system (Android Embedded). Preh Car Connect is responsible to supply the vehicle with the infrastructure and traffic data from the traffic management center VAMOS in Dresden.



figure 1: Connectivity-Box

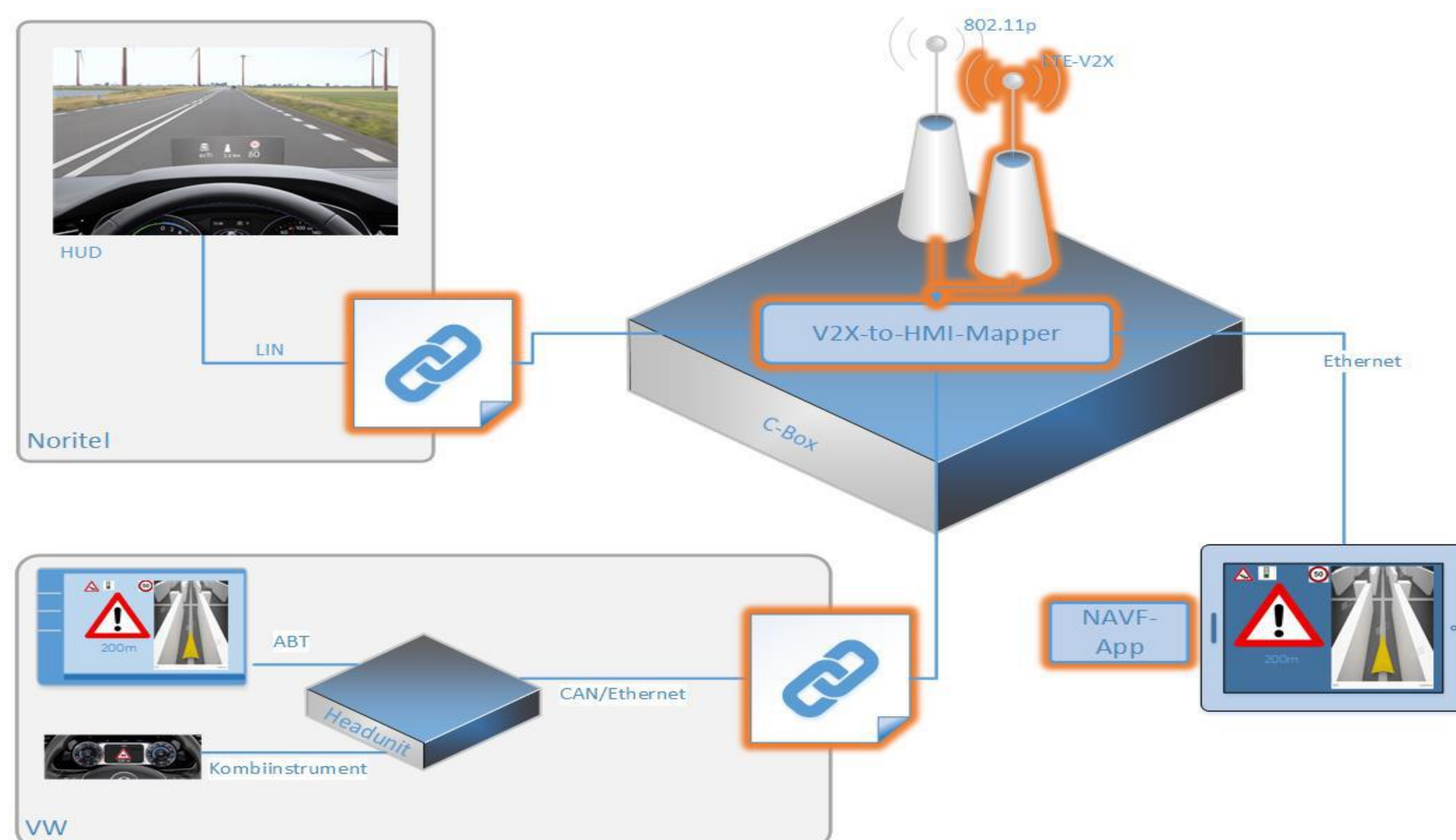


figure 2: Architecture

Project partner

- BMW AG
- IAV GmbH Ingenieurgesellschaft Auto und Verkehr
- Fraunhofer-Institut für Verkehrs- und Infrastruktursysteme IVI
- Vodafone GmbH
- MUGLER AG
- IVM Institut für vernetzte Mobilität GmbH
- Noritel Mobile Kommunikation GmbH
- Technische Universität Chemnitz
- Technische Universität Dresden
- Landeshauptstadt Dresden

Project lead

BMW AG

Project coordination

Fraunhofer-Institut für Verkehrs- und Infrastruktursysteme (IVI)

Lead partner

VDI / VDE Innovation + Technik GmbH

Duration

01.04.2017 – 30.06.2019 (27 months)

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