Fraunhofer FOKUS and Huawei use LTE-V2X-products for the first time in Germany

LTE-Vehicle-to-anything (V2X) is the new specification for the direct traffic related communication. Fraunhofer FOKUS integrates the first commercial LTE-V2X-products from Huawei, which provide the network technology in the roadside base stations and in the cars, into their digital urban traffic test field in Berlin. Vehicles, for example, can be warned even faster of a break-down vehicle.

Improving road safety through intelligent traffic systems is an essential advantage, expected from the growing number of connected cars on the way towards fully autonomous driving. LTE-V2X is a technology for direct vehicle-to-vehicle as well as vehicle-to-infrastructure or vehicle-to-network communication. It is internationally regarded as a basic precondition for connected driving and a basis for future 5G-use. The LTE extension enables the direct traffic related data exchange – without detouring via a central backend as e.g. with the 3G-standard. The connected cars can exchange information about e.g. the position, speed or an obstacle with other surrounding cars quickly and robustly.

Huawei, a leading supplier of mobile network equipment, offers the first commercial LTE-V2X based products for the road and vehicle. Huawei Technologies Deutschland GmbH and the Fraunhofer Institute for Open Communication Systems are now planning to integrate the Huawei LTE-V2X products into the Fraunhofer FOKUS-operated Digital Test Field in Berlin.

Building on many years of work by the European standardization organization ETSI on the WLAN V2X standard, the following use cases, among others, will be developed in the test field on the basis of the now commercially available LTE V2X transmission technology:

- Hazard warning, e.g. in front of a construction site or a breakdown vehicle
- Electronic brake indication (emergency brake)
- Speed recommendation from traffic light system

The goal of the cooperation consists in the joint testing of LTE-V2X-based products, suitable for the digitalization of the roadside traffic infrastructure.

Dr. Ilja Radusch, director of the business unit Smart Mobility at Fraunhofer FOKUS, explains: “Digitalization of the roadside infrastructure and vehicles becomes the most important building block of traffic safety. We therefore appreciate the opportunity for this first early use of the commercial LTE-V2X products in Germany.”

Dr. Michael Lemke, Senior Technology Principal Huawei Germany, adds: “We are happy about the fact, that now an additional technology – based on LTE – becomes available beside the WLAN-V2X and its potential can be shown for the first time in an urban environment using an established inner-city test field.”
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Fraunhofer FOKUS
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URL zur Pressemitteilung: https://www.testfeld-berlin.de/ Digital Testbed Urban Traffic Berlin
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