Application of WLAN vehicle-to-vehicle communication for automatic guidance of a vehicle driven in platoon

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***Abstract*—This paper presents the feasibility of applying vehicle-to-vehicle communication based on Wireless Local Area Network (WLAN) technology to longitudinal automatic guidance of a vehicle driven in platoon. The feasibility study is a part of the interdisciplinary project "Vorbereitende Maßnahmen für den praktischen Einsatz von Fahrerassistenz-systemen im Güterverkehr"[1] (MFG), of the RWTH-Aachen supported by the German Federal Ministry for Education and Research. Within this project the application of a well-known communication technology (WLAN) for automatic guidance of the following vehicle in a platoon of two vehicles was successfully demonstrated.**

***Index terms*—vehicle-to-vehicle communication, automatic guidance, driver assistance, communication architecture**