

@CITY – a complete success: MAN and project partners pave the way for autonomous urban transport

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June 28, 2022

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2022, the partners presented the results on the premises of the Aldenhoven Testing Center.

“Automated driving is an important component in making urban mobility fit for the future,” says Walter Schwertberger, Project Manager @CITY at MAN Truck & Bus. “That’s why we supported the research initiative and worked together to develop solutions to the challenges of bringing automation technology to urban road transport.”

Modern urban traffic is even more complex than traffic in clearly structured environments such as highways: A wide variety of road users move with individual dynamics and diverse directions of movement in a very confined space. As a result, urban areas present a completely different mobility framework for the establishment of automation technologies than, for example, hub-to-hub transport by truck on the highway.

@CITY joint project on automated driving in urban environments

In order to be able to exploit the potential of automated vehicles for greater safety, energy efficiency and quality of life in urban mobility as well, 15 partners from the automotive industry, supplier industry, software development, science and research institutes joined forces in 2017 in the @CITY joint project funded by the German Federal Ministry of Economics and Climate Action (BMWK). In various subprojects, they addressed the diverse technical requirements of automated driving in turbulent urban traffic with other motor vehicles, pedestrians and cyclists: the precise detection of the vehicle environment by means of various sensors and the correct understanding of situations, the correct derivation of courses of action, but also the exact localization to within a few centimeters using digital maps as well as communication with other traffic actors. Building on this, automated driving functions were implemented as prototypes in test vehicles and tested under realistic conditions. MAN Truck & Bus focused on the development of technologies for city buses that enable automated approaching of stops.

MAN Lion's City drives to stop with high-precision automation

At the official presentation of the @CITY project results on June 22, 2022, at the Aldenhoven Testing Center, MAN demonstrated the sensitive precision of the bus, because the highly accurate approach to the curb of the bus stop not only determines whether passengers can get on and off the bus with optimum accessibility, but also helps to protect the tires and thus reduce wear and costs. The automated MAN bus in the @City project has also already mastered communication with other vehicles for safe exit from the stop: when the left turn signal is set, an electronic signal is simultaneously sent to automated cars approaching from behind so that they slow down and wait until the bus has safely left the stop again. “@CITY has given us important insights on the way to automated city bus transport and has shown us how we can use autonomous driving functions but also communication with other vehicles sensibly in practical operation,” Walter Schwertberger summed up at the end of the two-day project demonstrations in Aldenhoven.

SOURCE: MAN Truck & Bus (<https://press.mantruckandbus.com/corporate/city---a-complete-success-man-and-project-partners-pave-the-way-for-autonomous-urban-transport/>)