



MOTORCYCLE PROBE VEHICLE: EVALUATING POWERED TWO-WHEELER SAFETY

The MoProVe (Motorcycle Probe Vehicle) was developed to understand the causes for accidents involving motorcycles.

At AIT, a KTM 1290 Super Adventure S was transformed into a high-tech research and measuring bike featuring a camera system, steering angle sensors, accelerometers, CAN-Bus reader and dGPS.

MoProVe is available for road safety testing of motorbike routes. It enables a driving dynamics analysis based on the respective driving behaviour and interaction with the road infrastructure. The results show road sections that are particularly risky for motorcyclists. In addition, the findings obtained can be compared with the data collected by means of measurement cars or measurement trucks (AIT RoadSTAR) and thus make a decisive contribution to improving road safety. The goal is to prevent accidents before they happen.





OBJECTIVES

- Research on vehicle dynamics of PTWs (Powered Two-Wheelers)
- Measurements of specific riding manoeuvres
- Research on the interaction of PTW and road surface
- Comparison of cars-/trucks-/PTW-vehicle dynamics on the same route
- Validation of in-vehicle sensors
- Motorcycle specific safety inspections
- Comparison with infrastructure data from the measuring cars/trucks on the same route

TECHNICAL DATA/SENSORS

- KTM 1290 Super Adventure S
- Sensors: VBOX (Company Racelogic; Accelerometers, dGPS, IMU, CAN reader, CAN bus data logger)
- VBOX Video system

PARTNER

- KTM AG



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