



HUMAN-MACHINE-
INTERACTION

BASt Wizard-of-Oz Vehicle (WoOz)

FEATURES

- The testing vehicle is equipped with a second driver seat in the back, which is used to simulate automated driving by a human driver
- The construction of the vehicle allows convincing simulation of an automated driving function (completely concealed and unrecognizable for participants)
- The BASt WoOz can be used on test tracks as well as on public roads
- For transitions between manual and automated driving, a specific Human-Machine-Interaction (HMI) concept is implemented



DATA RECORDING

Numerous measuring systems capture:

- driving data (e.g. speed, headway, lane keeping, accelerations, yaw rate, etc.)
- participant's head position and gaze direction
- different camera views to observe the participant and the surrounding traffic
- physiological data (e.g. blood volume pulse, electro dermal activity etc.)
- reaction times to evaluate participant's takeover performance



HMI

- Display between speedometer and rev counter keeps the participant informed on the availability of automation, the current driving mode and takeover requests to manual driving
- The takeover requests are also shown on a tablet-PC used for tasks unrelated to driving (e.g. the standardized Surrogate Reference Task – SuRT)
- A green button on the steering wheel allows participants to confirm transitions between manual and automated driving

bast

Torsten Marx, Alexander T. Frey

www.ko-haf.de

Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages