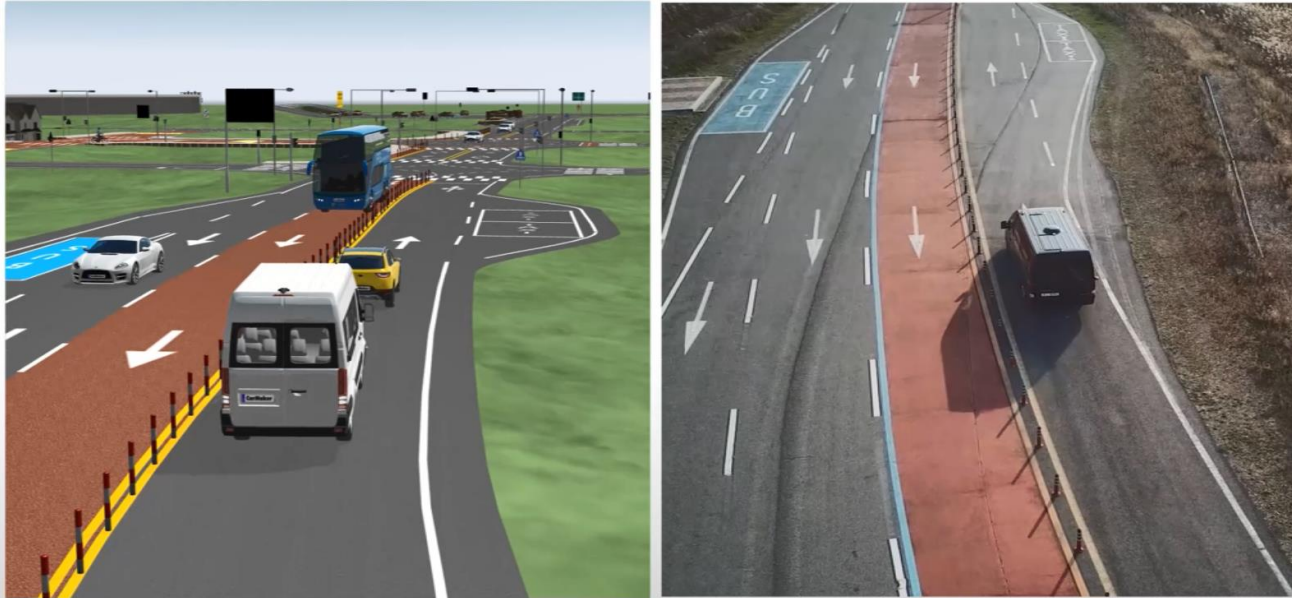


Autonomous Vehicle-in-the-Loop

Using virtual traffic objects on K-City autonomous vehicle proving ground



Low Speed Vehicle Following
Automated Vehicle Safety Requirement Annex. 1

Source: Open House Germany, 2023

Challenge:

- Staging complex and dangerous scenarios with multiple traffic objects on proving ground
- Reproducibility of proving ground testing

Solution:

- Digital twin of K-City proving ground
- Injection of synthetic sensor data into AV stack by utilizing Vehicle-in-the-Loop setup

Significant savings for proving ground targets and reduced effort for operation
Testing in virtual K-City can be transferred to any other proving ground