

## Co-simulation demonstration (research project Multiplayer) – text version

Text: "Multiplayer", Co-simulation demonstration, Connecting multiple simulators in Stockholm and Linköping via cloud infrastructure.

Speaker: The Vinnova project – Multiplayer - is intended to show the possibilities with co-simulation.

Speaker: Here we demonstrate a real-time simulation, via a cloud-service on the internet.

Speaker: In this example, six different simulators are connected to the same simulation environment:

- The VTI Autonomous Bus Simulator - where a passenger can experience the ride using a VR-headset.
- The Scania Truck Driving Simulator.
- The VTI Pedestrian Simulator.
- Sumo Traffic Simulator - commonly used for micro traffic simulation.
- A Helicopter view.
- A Web-based 3D enabled Scenario Viewer.

Text: Co-simulated interaction between traffic and driving simulators.

Speaker: In the helicopter view we see how the self-driving bus drives first.

Speaker: Behind it, we see a blue car controlled by the traffic simulator. This is followed by a truck driven from the truck simulator.

Speaker: The self-driving bus halts at a bus stop, and is overtaken by the traffic-simulated vehicle. The truck stops behind the bus.

Text: Co-simulated interaction between pedestrian and driving simulators

Speaker: Further down the street, a pedestrian is waiting to cross the road.

Speaker: The self-driving bus approaches the pedestrian, who then steps out into the street, forcing the bus to stop.

Speaker: Once the pedestrian has crossed the street, the bus and the truck can continue their journey.

Text: Multiplayer, a project in collaboration between VTI, Scania and Geisst.

Link to the film

<https://youtu.be/jisJwu-sEdM>