

# Challenging and Time Consuming Testing

Testing advanced driver assistance (ADAS) and autonomous (AD) systems without accurate **HD maps** slows down innovation in transport.

Evaluation of positional accuracy in testing results requires highly accurate and reliable **reference data** accurately representing the real-world environment.

The requirements for complex testing scenarios are continuously increasing, involving situations that cannot be easily planned in a real-world environment. These **scenarios demand** more driven kilometers, leading to higher financial costs and potential additional safety risks.



### **HD** maps

Highly accurate maps for simulation, validation and testing in a controlled virtual environment.



# Virtual reality

Testing technologies in a virtual environment verifies the reliability of ADAS/AD systems.



**HD maps** create a highly detailed digital representation of the real world, providing essential reference data for the development of advanced ADAS/AD systems.

With Ultra HD mobile mapping **technology**, we can capture reality with centimeter-level accuracy, and with fast data processing supported by elements of artificial intelligence, we can create a custom HD map for you in a short time (e.g., OpenDRIVE, Road5)

**Virtual testing** and simulation using HD maps enable the acceleration of technology development and significantly reduce costs associated with real-world testing.



### Rapid mapping

Quick reality capture and HD map creation in the format you need.





## Solutions for validation testing

Do you find the development and testing of new technologies time and financially challenging?

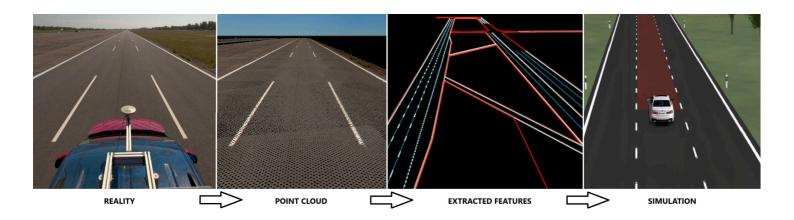
Using HD maps in the testing process **accelerates development cycles** and enables the transition of testing scenarios into a virtual environment.

3D data (point cloud) provide a reliable and highly accurate representation of testing routes (**Ground Truth**), which you can use to benchmark the reliability and accuracy of vehicle positioning systems.

## **Legislation & Presentation**

HD maps help you prepare for upcoming **legislative changes** that will require an increasing number of testing scenarios to be conducted in a virtual environments. Simulations reduce your carbon footprint while making testing faster, cheaper, and safer.

**Promote** the testing location as a modern space for technology development, complemented by offering HD/ADAS maps optimized for vehicle systems and simulators.



## **Increasing Competitiveness**

The use of customized **HD maps** enables efficient development and testing of ADAS/AD technologies, leading to faster, more efficient, and safer deployment of these systems.

### Reference



"CEDA Maps fully digitized our test polygon and created an HD map of the main test track in OpenDRIVE format. This step significantly enhances our testing capabilities for driver assistance systems within the development process, including their simulation in a virtual environment."

**Lukáš Pařil**, ADAS Global System Validation Vehicle Operation and Regulation Manager



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We create a digital image of the world. We help people and cargo get to their destination the best way every time. Build the safe, sustainable and efficient mobility of tomorrow with us.

