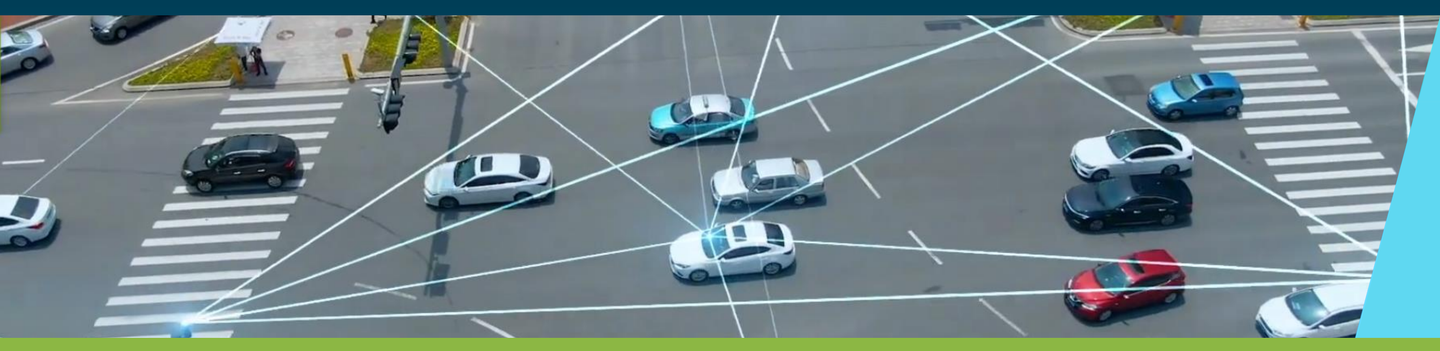


AI4CSM

Automotive Intelligence for Connected Shared Mobility

SC1:
Smart Connected Shared Mobility for Urban Area

Vision

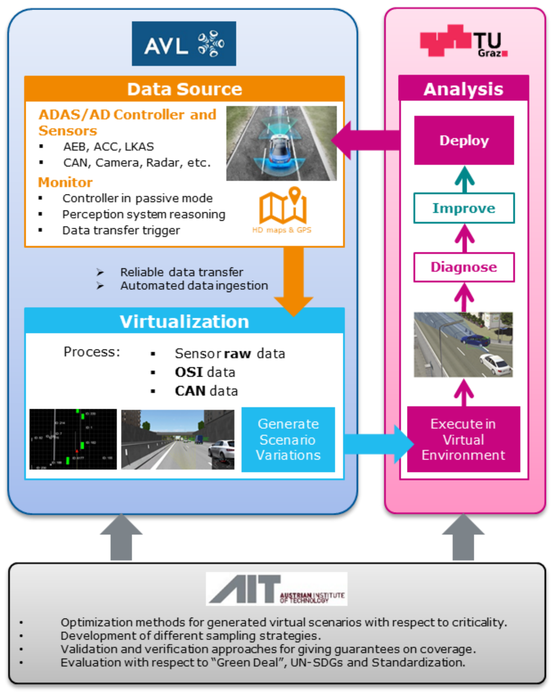
- Enable a safe, efficient & green autonomous mobility in urban areas trough connected mobility
  - **Safe:** safety enhancement via cooperative integration of cloud knowledge into edge perception & vehicle intelligence solutions
  - **Efficient:** maximize traffic throughput with minimum latency time together with minimizing active cars in urban environments
  - **Green:** consideration of shared resources for minimizing energy consumption

Objectives

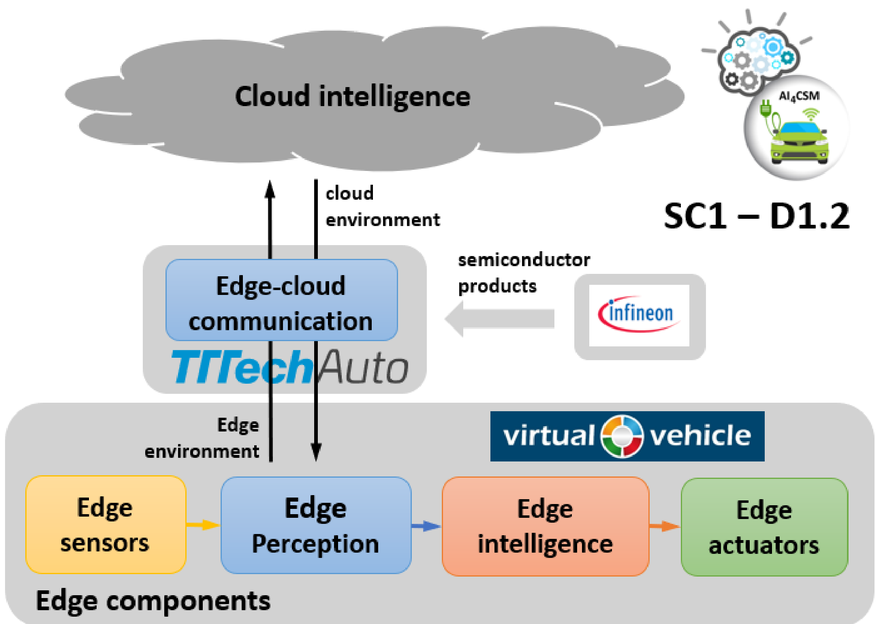
- O1 – Develop robust and reliable mobile platforms
- O2 – Develop scalable and embedded intelligence for edge and edge/cloud operation
- O6 – Build ECAS vehicles for the green deal and future connected, shared mobility

Demonstrators

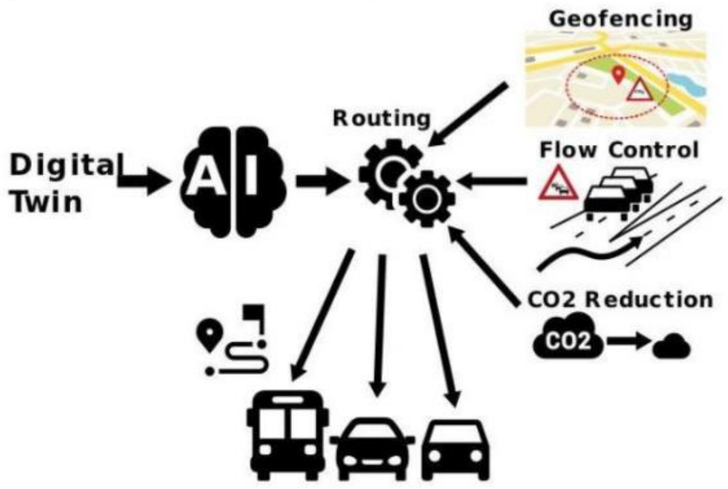
- **SCD 1.1: Lessons-learned based (critical scenario) update of ADAS/AD Controller**
  (**AVL**; TUGRAZ, AIT)
  SC1 partner will deliver an AI training center for safety-critical scenarios to further enhance the automated driving function under test. In that manner valuable situations for verification and validation of new driving functions will be detected and recorded, sent to a datacenter and in a post-processing step converted into a virtual driving scenario.



- **SCD 1.2: Robo-taxi**
  (**VIF**; TTTAUTO, IFAG)
  The robo-taxi demonstrator focuses on the verification and validation of edge environment perception and vehicle intelligence algorithms for customer fetch-up use cases in urban areas. In addition, bidirectional communication approaches to the cloud (developed in SC5) will be integrated and evaluated in complex urban areas.



- **SCD 1.3: Virtual city routing**
  (**OTH-AW**; VGTU, VIF)
  The virtual city routing demonstrator showcases energy- and time-optimized routes for simulated electric ridesharing vehicle fleets in urban areas. The aim is to decrease the shared mobility latency time together with a traffic throughput increase. SCD 1.3 has a strong link to SC8 considering geofencing and smart charging for future smart and green cities.



Partners

Type
Output Enabler

TRL
Start: 2-3, End: 4-5

www.v2c2.at www.ai4csm.eu Twitter @AI4CSM LinkedIn AI4CSM

AI4CSM has been accepted for funding within the Electronic Components and Systems For European Leadership Joint Undertaking in collaboration with the European Union's H2020 Framework Programme (H2020/2014-2020) and National Authorities, under grant agreement n° 101007326.

Gerhard Dorn, Michael Stolz
VIRTUAL VEHICLE, Austria
gerhard.dorn@v2c2.at