What is openPASS? ecosystem with simulator + API + scenario engines;
Supporting and harmonizing virtual assessment by providing the needed interfaces and open componentes

– slide „Vision“:
  – Current: high level of transparency through publicly available open source platform, modularity, flexibility, stochastic variation, harmonization ➔ acceptance for simulation environment
  – New: openPASS is an ecosystem for APIs, software components and models around the modular simulation platform; reference implementation of MantleAPI and open standards such as OSC 1.0

– slide “Platform idea”:
  – Current: Vision of modular framework: e.g. develop against AgentInterface, simulation in multiple use cases

– Example for API use / benefits: multiple scenario engines, multiple simulation cores
– Re-use existing slides; add slide with use in research projects / interaction with other FOSS projects
openPASS
(open Platform for Assessment of Safety Systems)

High level of transparency and acceptance through publicly available open source platform

Traffic simulation of highway, rural and urban scenarios

Stochastic variation of scenarios

Reproducibility through deterministic simulation

Standardized interfaces for model integration

Harmonized and flexible platform for effectiveness assessment of advanced driver assistance systems and automated driving
OPENPASS PLATFORM – FOCUS ON XOSC, API

Agent Components *
- Driver
- Vehicle
- Sensor
- Function

Standardized Interfaces

API, engines ➔ new repos

Scenario formats
- XOSC 1.0
- XOSC 2.0
- Other language

openPASS

Safety Performance Assessment
Virtual Testing / Homologation
Functional Development
Accident Research

SIMULATION CORE

ThirdParty / proprietary simulation tools

SIMULATOR

Mantle API

Other Engine

XOSC 1.0 Engine

openPASS