OPENPASS

NEW OPENPASS STANDARD SLIDES

openPASS

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

VISION

openPASS

openPASS
(open **P**latform for **A**ssessment of **S**afety **S**ystems)

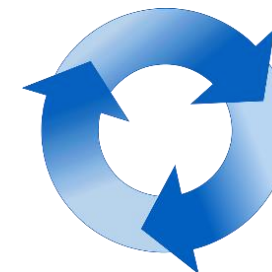High level of transparency and acceptance through publicly available open source platform

Stochastic variation
of scenarios

Reproducibility through deterministic simulation

Traffic simulation of highway, rural and urban scenarios

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

openPASS

API, engines ➔ new repos

internal / proprietary

Agent Components *

Driver   Vehicle   Sensor   Function

Standardized Interfaces

Scenario formats

XOSC 1.0

XOSC 2.0

Other language

XOSC1.0 Engine

other Engine

Mantle API

openPASS

SIMULA-TION CORE

ThirdParty / proprietary simulation tools

Safety Performance Assessment

Virtual Testing / Homologation

Functional Development

Accident Research

Scenario formats

API

Simulator

openPASS

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