OPENPASS SC WEBCON – MAY 9

− Status from latest AC meetings / progress towards v0.6
  − Webcons in March, April: v0.6 „scenario-based AEB assessment“ planned in Tuleap
  − Next meeting on July 4 in Munich: review v0.6 / plan v0.7?

− openPASS organization: process, product manager, org next steps (v0.7, v0.8..)
  − Process from July 2018: active, but in „maintenance mode“, not moderated
  − status Product Manager

− Possible next steps derived from discussion of v0.6 „scenario-based AEB assessment“
  − action points (consolidation, observation/logging, GUI features, visualisation)
  − additional OpenScenario capability, additional requirements for use of openPASS in Set-Level-4-to-5?

− Possible next steps => „major release“ V1.0 (?)
  − Still no stronger link to relevant stakeholders e. g. PEARs or rating groups who might use openPASS
openPASS provides the **framework and exemplary implementations** of various assessment approaches of ADAS/AD; main prerequisite: **a valid baseline model**, i. e. source of conflict situations
- e. g. „list of PCM cases“ is such a, very simple model; use of accident data as baseline

But openPASS allows **new way of understanding accident research**: full-scale stochastic traffic simulation incorporating accident situations => based on „traffic simulation use case“, but for all traffic

High level requirements:
- World needs to reflect complex infrastructure (see OpenDRIVE incl. acc. types: turning, crossing, VRU…)
- Intelligent/applicable human model: capable of handling complex traffic situations, incorporating human error
- Combination with scenario-based approach: use deterministic behaviour, if behaviour model not yet done

**Actions:** amend „OSI_World“, start modular driver model architecture, follow „OpenScenario 2.0“ discussion
NEXT STEPS: OPENDRIVE / OSI WORLD

Requirements e.g.:
„Sensor of Agent => World: at crossing - is there an agent on the bicycle lane crossing my left-turn path?“

Questions (=> next AC, BMW/in-tech):

Are there plans in v0.6 to extend the OSI_World?

Are there any constraints, e.g. OSI project?

Can other partners contribute to this development?

Actions:
clear documentation (OpenDRIVE, OSI, openPASS)
world amendments reflected in release plan (epic?)
− **Guest member TU Dresden (10 min)**
− since early stages of openPASS and PEARs (2016/2017): discussion between founding members to include TU Dresden / AMFD in openPASS developer team, as „scientific partner“
− Role: independent, scientific link to assessment methodology development in general, but mainly: development of human traffic participant behaviour models, applicable for critical situations
− already copyright holder of several components in OSI use case from previous projects
− Current openPASS related projects, e. g. migration of SUMO models, comparison with highD data
− **on working group level:** TU Dresden joined Eclipse as „Associate member“, now we can invite them according to the openPASS Charter to participate in our discussions as guest: **any objections?**
− **on project level: committer vote** => include Konstantin Blenz (already registered in Tuleap)
− Next steps: include TUD in next openPASS meeting July 4 => proposal: modular driver architecture
“EXTERNAL" COMMITS

- Process for “external commits” (10 min)
  - Main focus of openPASS development: planned open source commits on behalf of working group members
  - Discussion in Feb 2019: how to deal with code from external sources? EPL => copy left effect, so developer has to publish the changes open source anyways
  - openPASS repositories should be open for useful amendments

- Proposal for process => review in both SC and AC
  - Get overview on who the developer is and what the developer has done, e.g. one pager
    - Content: is the content of the commit useful for the master branch?
    - Architecture: is the commit e.g. a new, independent component or requires it changes to the interfaces?
  - Reflect selected content in release planning e.g. as user story in Tuleap
  - Commit to new branch => review: check quality, functionality
  - Merge „external commit“ to master branch
Inhalte KAUSAL AP1 2018 - openPASS

**Erweiterung Observer**

„Test-commit“ als erster Beitrag zu openPASS

- „observation_implementation: Ausgabe ausgewählter Observer-Daten analog zum „highD1“ Dataset-Format

**X_Trajectories.csv“:
frame, Id, typeid, x, y, xVelocity, yVelocity, xAcceleration, yAcceleration, dhw, thw, ttc, precedingId, precedingXVelocity, followingId, laneId, lanechanges

**X_Macro.csv“:
frame, density, flow, numlanechanges, numlanechangesCars, numlanechangesTrucks

- Aus aktuellen AgentInterface
- Erweiterung AgentInterface um „KAUSAL“-Methoden
- Erweiterung Observer um „KAUSAL“-Methoden

PROSPECT General Assembly | 10th May 2017