# **Coordination Group: Simulation**

## **Current Activities and Outlook**

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TSC

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## **Simulation Domain at ASAM**

## **Core aim of ASAM Simulation activities**

Enable and support the automotive industry in furthering the state of autonomous driving activities, especially with respect to (virtual) validation and/or verification.

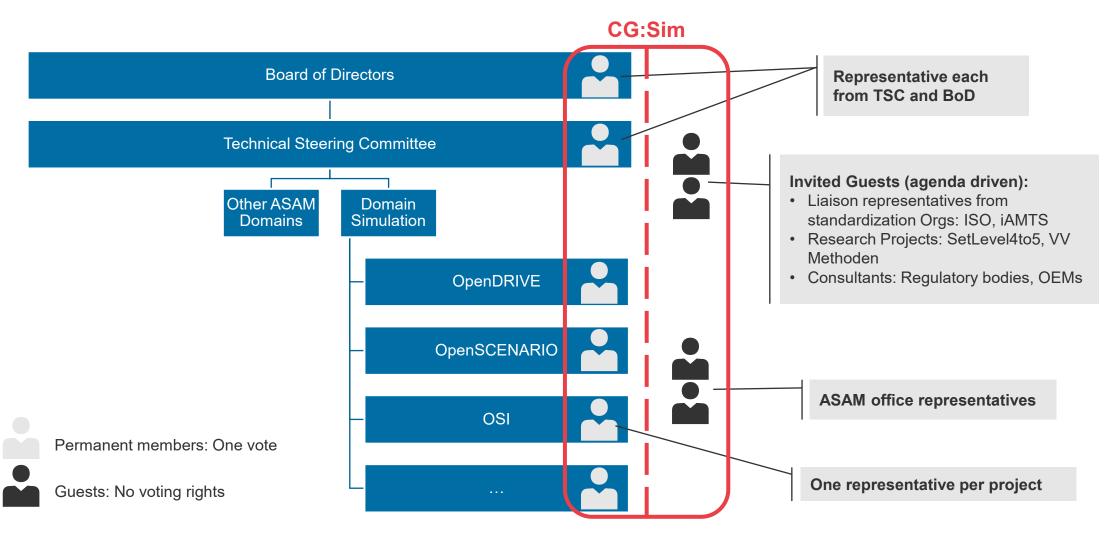


## CG:Sim - Who? When? Where?



## **Coordination Group: Simulation**

Setup





## **Coordination Group: Simulation**

Mode of operation

#### Bi-weekly web meetings started early 2020

### **Aiming at Transparency: Minutes & Decisions**

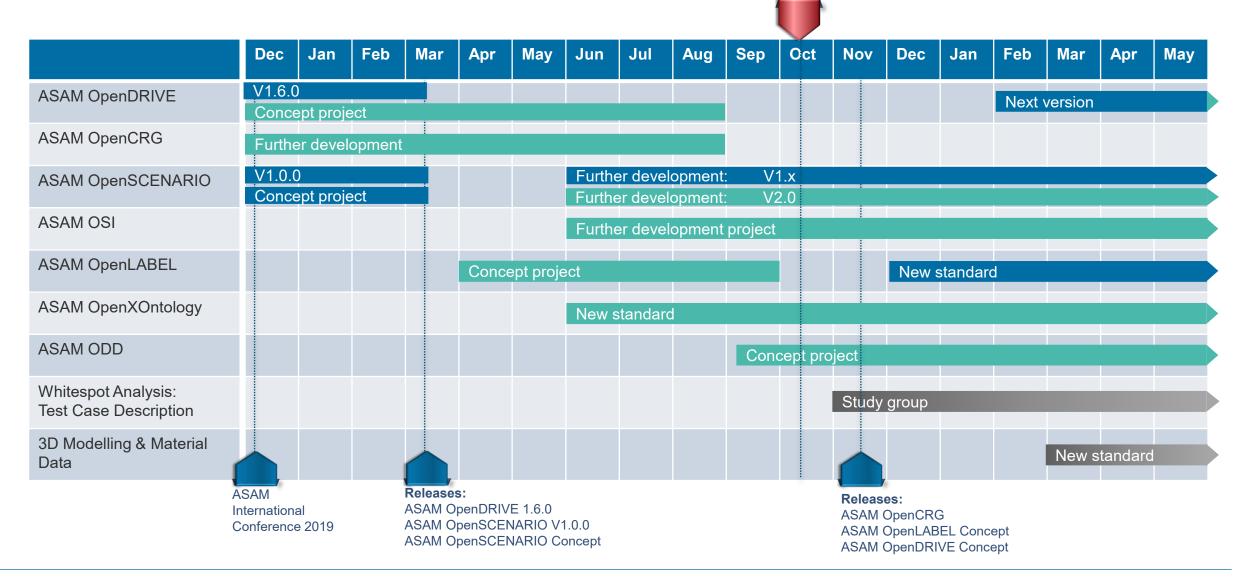
- Draft of minutes planned to be sent to TSC, BoD, and CG:Sim prior to release for feedback
- Vetted release by ASAM office planned via standard communication channels



# **Project-related Activities**



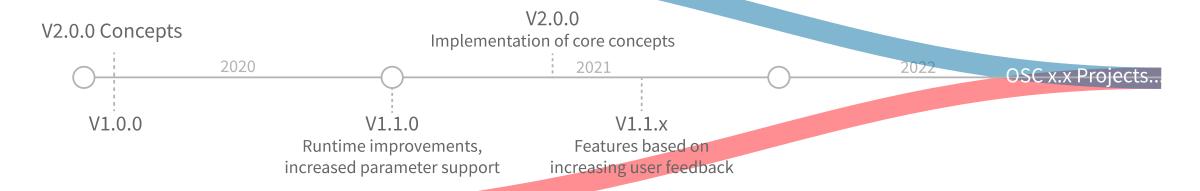
## **Current and Upcoming Projects in the Simulation Domain**





## Roadmap OpenSCENARIO

### OSC 2.x Projects



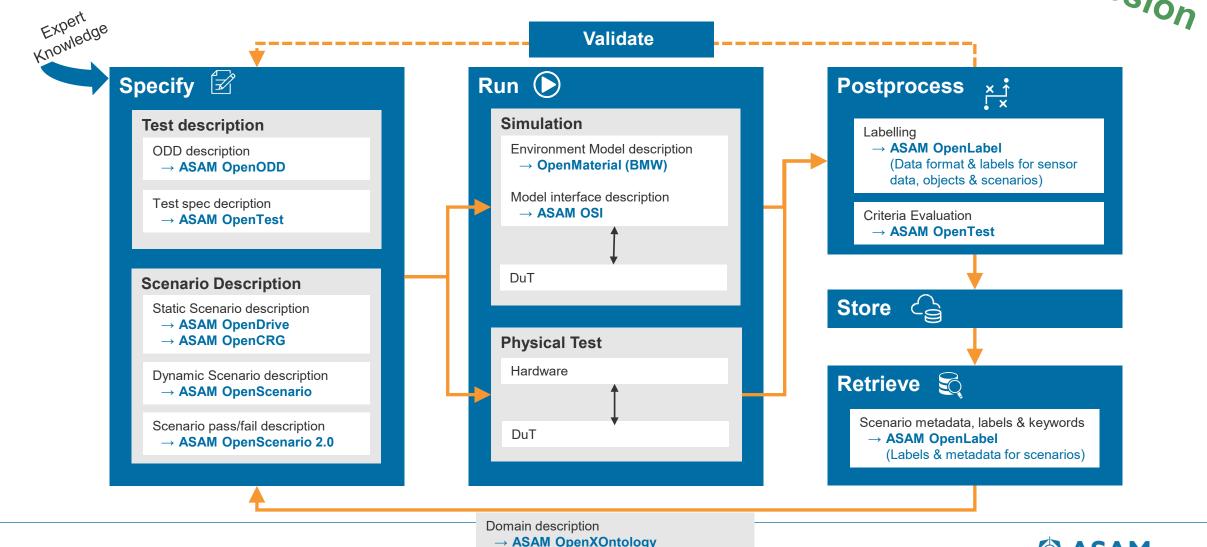
OSC 1.x Projects

A convergence of the two versions will require further releases of OpenSCENARIO, which will be developed in subsequent OpenSCENARIO 1.x projects



## ASAM OpenX Standards and how they fit together Example: Scenario-based-Testing





Formal representation of the domain

## **Project-related activities**

#### Releases, new standardization projects

#### **Alignment amongst OpenX Standardization Projects**

- e.g. Open Scenario 1.x <-> 2.0
- e.g. OpenXOntology <-> OpenScenario

### Open Source Tooling related to OpenX Standards: OpenSCENARIO 1.0.0 API checker

- 1st open source tool in simulation domain
- Goal: provide an open source platform for tools, examples, etc. which are adjacent to ASAM simulation standards
- Get in touch with us if you want to contribute
- Please support building a community around our simulation domain standards

### **Proposal on Study Group for Scenario-based testing**



## **Collaboration with Others**



## **Collaboration activities**

### Simulation in autonomous driving is common – and others are also working on standards

- Avoid overlapping (and possibly conflicting or competing) standards
- Ensure smooth co-existence → same taxonomy, understanding, ...

#### Initiate collaboration project with SAE

- Initial alignment done
- (Short-term) goal: common "Taxonomy Definition" group
- Difficult: align on procedures and workflows (how to publish a joint standard?)

### Involvement in research projects: SetLevel4to5, VV Methoden, KI, ...

- Cross participation in project meetings
- ASAM wants to make sure standard adoption and exchange on simulation standards in research projects



## Conclusions



## The road ahead

Coordination Group: Simulation is supporting the TSC to steer the simulation domain by

- Coordinating standardization projects in the simulation domain
- Initiate collaboration with other standardization organizations and research projects
- Identify missing standards in the simulation domain
  - E.g. Scenario-based testing study project

Simulation Domain Roadmap At ASAM is still under construction, please reach out to us with your ideas and input



# Thank you for your attention!

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