

Overview on the data flow based on ASAM standards

Quantifying Simulation Quality

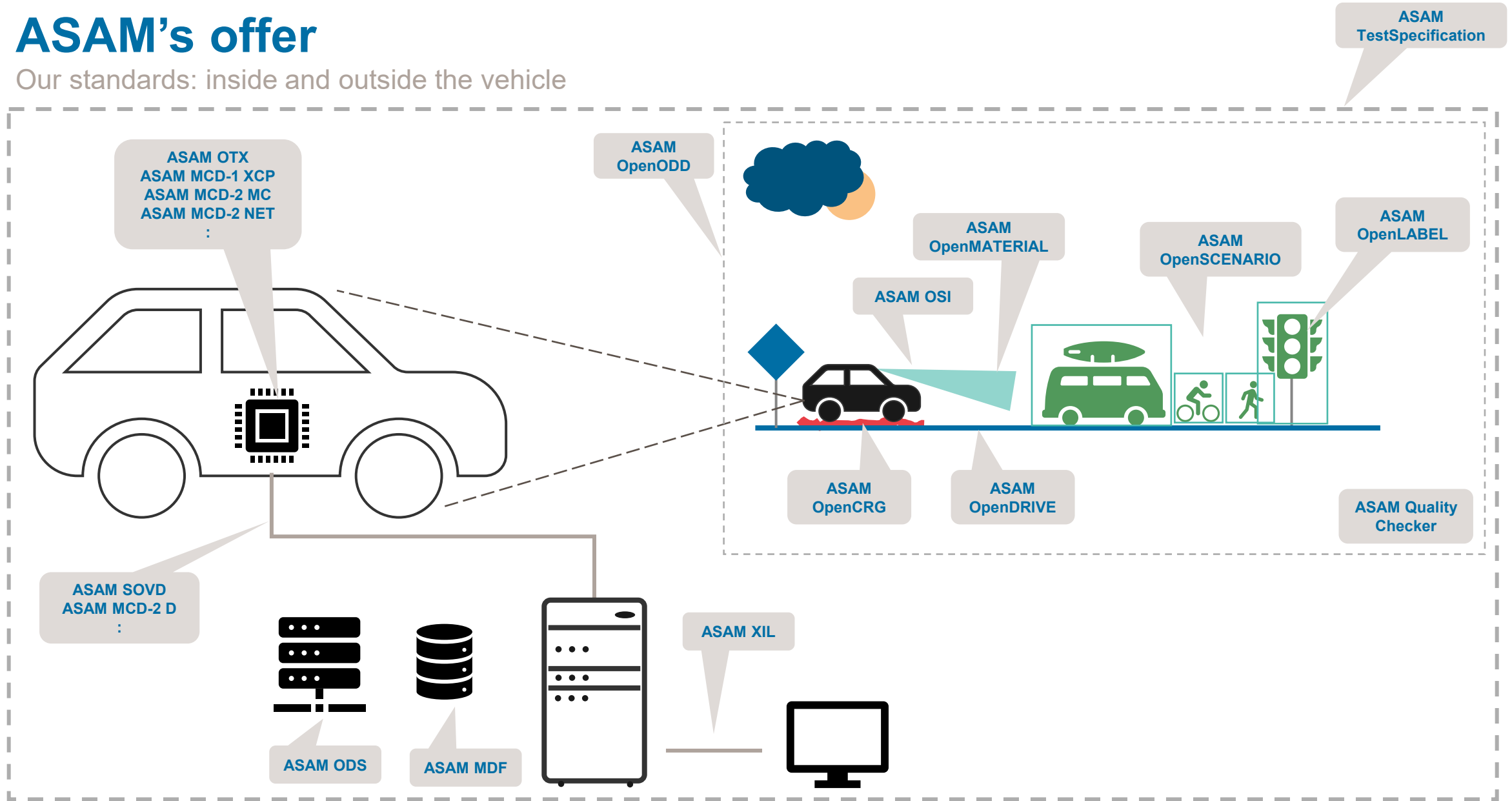
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Technology Manager

Sep, 11, 2024
Höhenkirchen



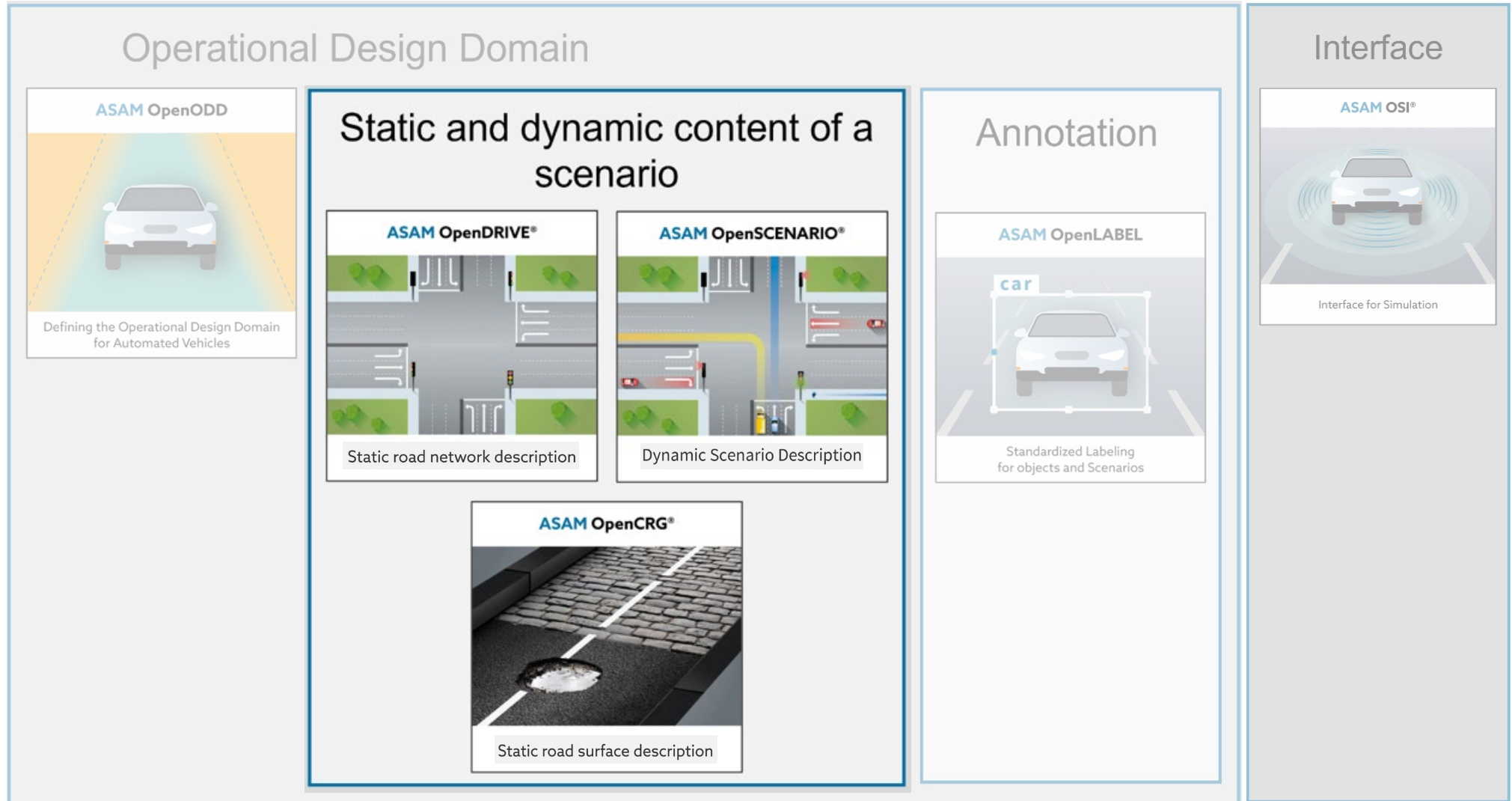
ASAM's offer

Our standards: inside and outside the vehicle



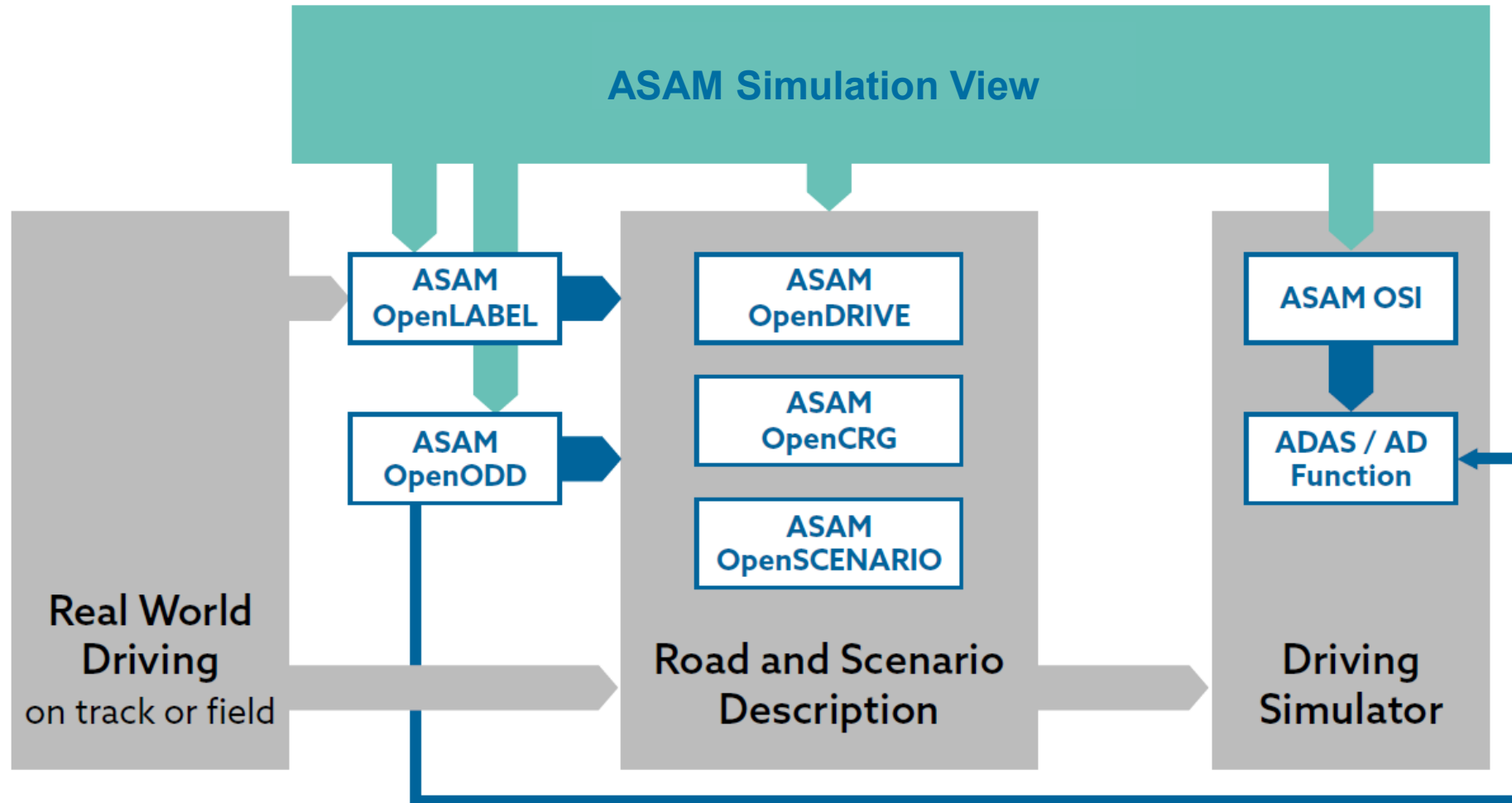
The Evolution of the Simulation Domain

How it began

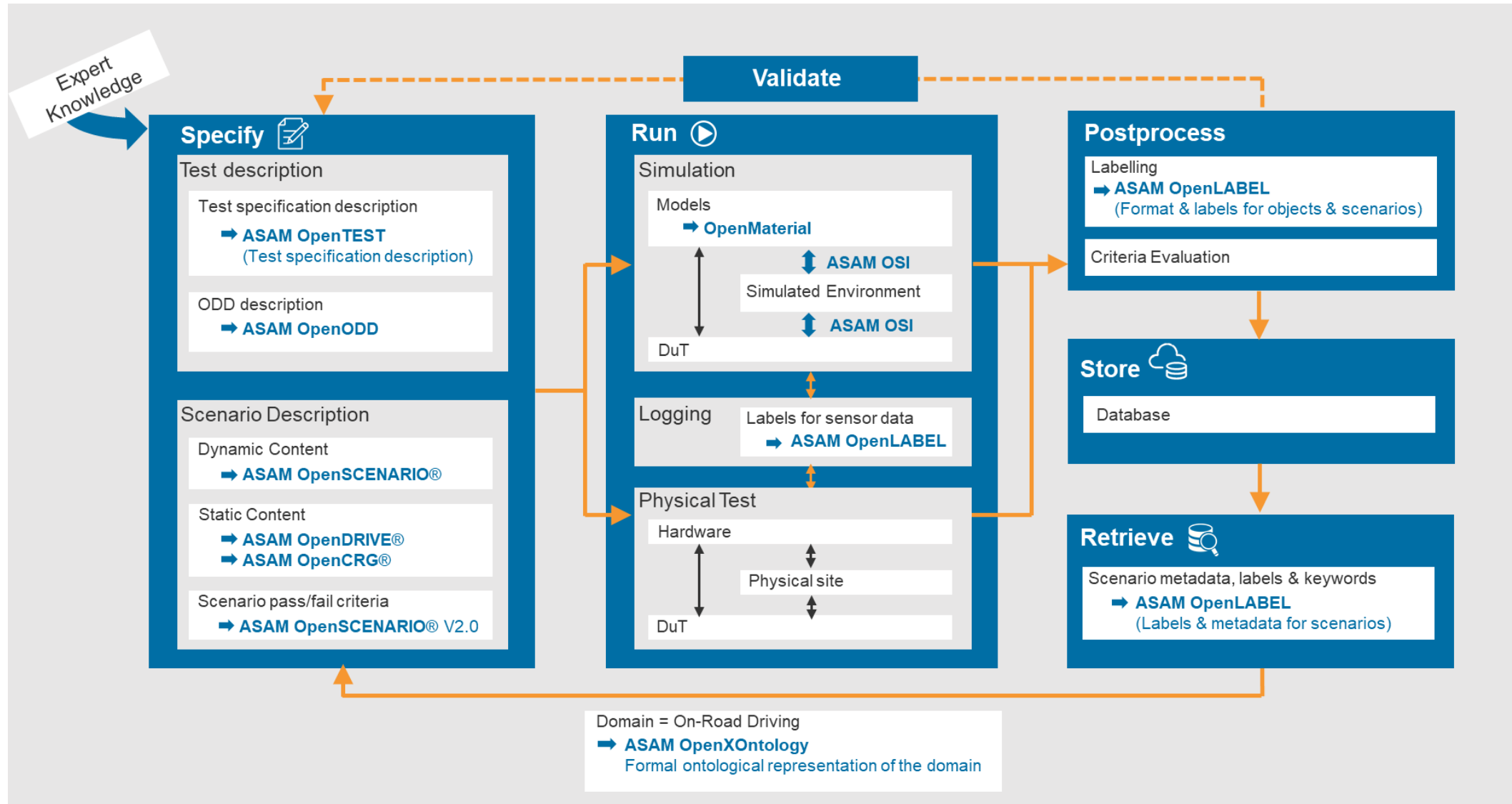


Identifying and Filling Gaps in Simulation

ASAM Simulation View

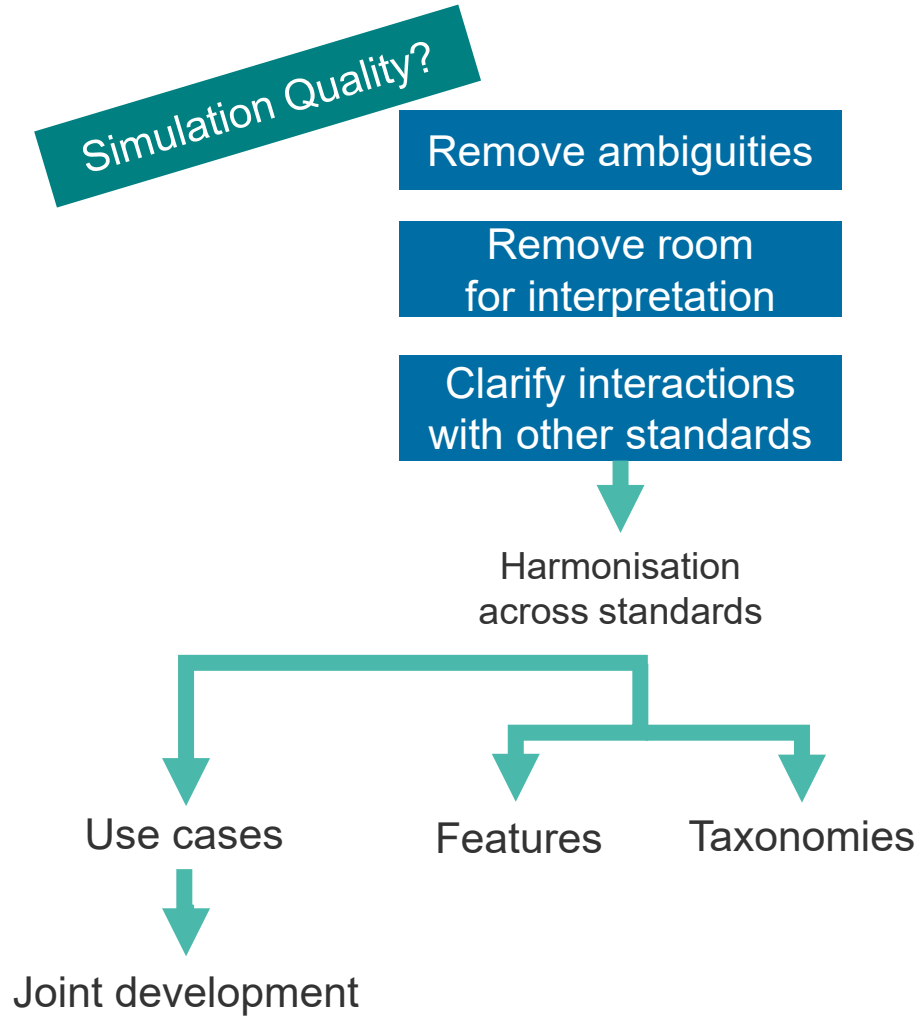


Scenario-Based Testing (SBT) with OpenX



Another example: Traffic participants

Mitigating the differences



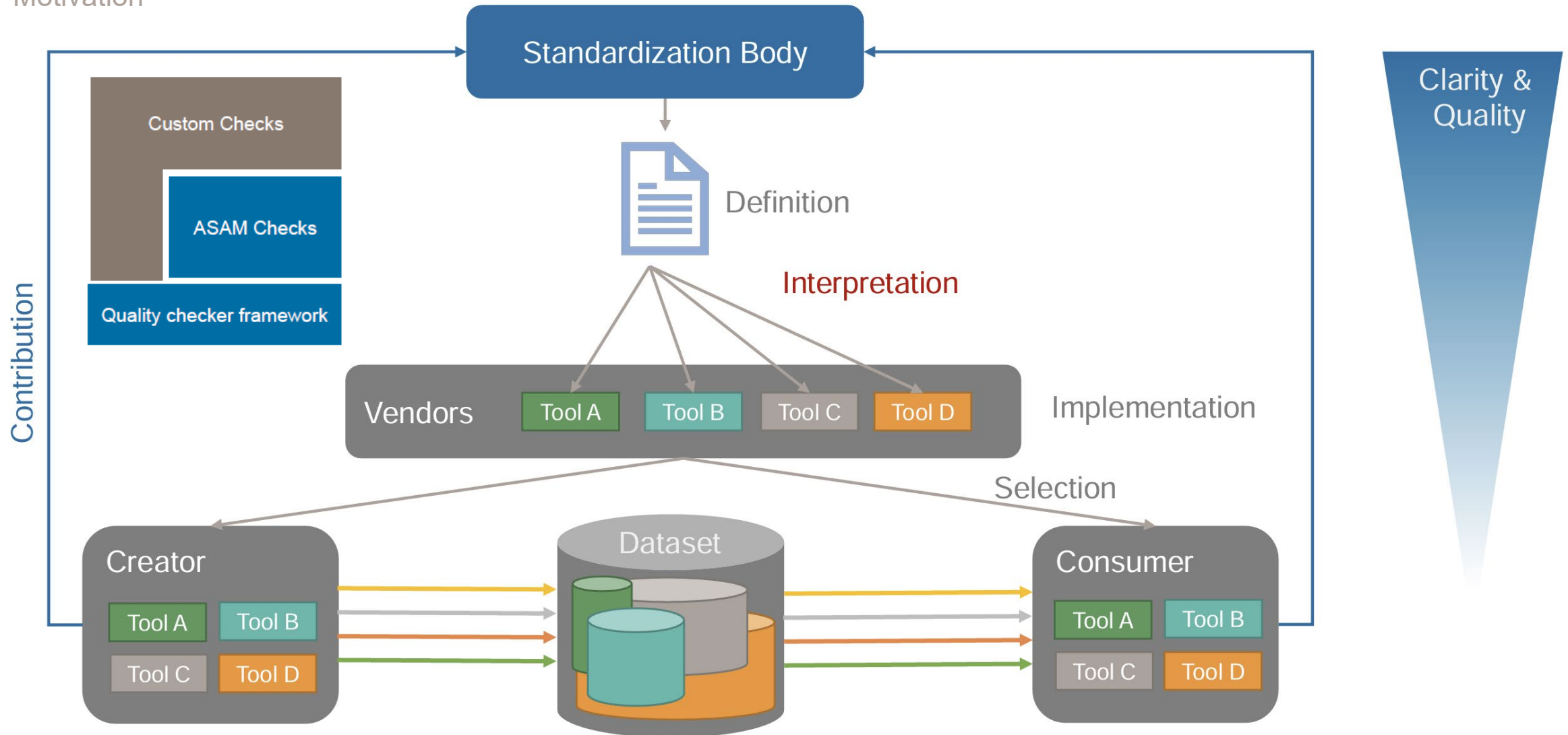
A **pedestrian** in OSC XML and a **vehicle** in OSI.



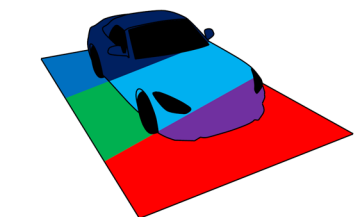
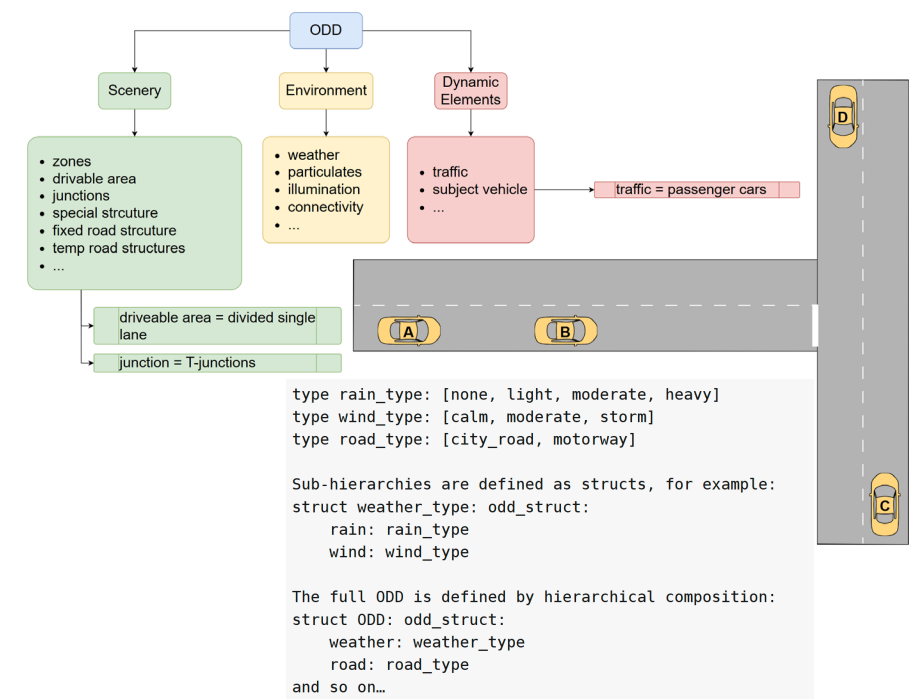
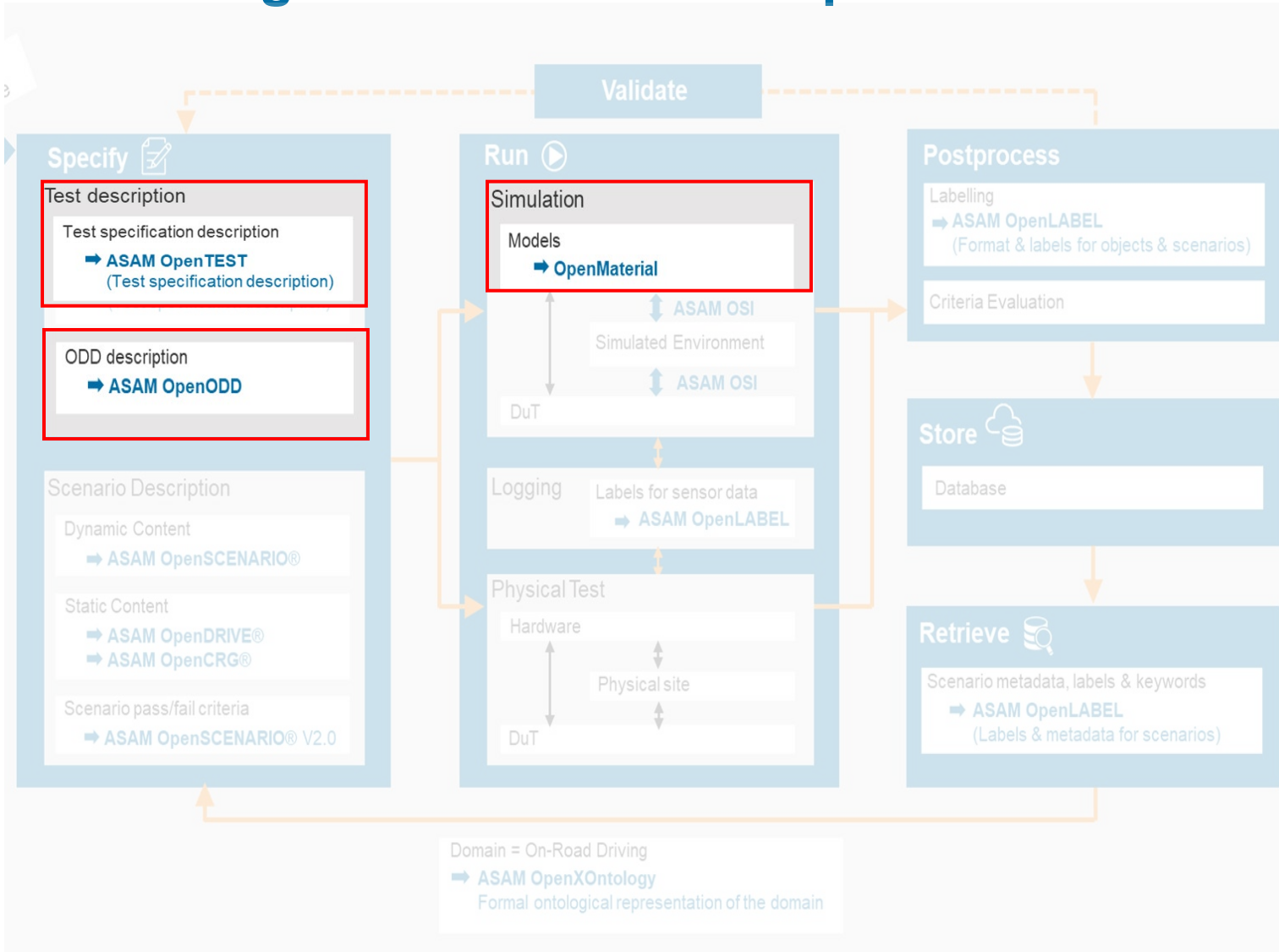
Truck or **car with trailer** in OSC XML? **Luxury_Sedan with Trailer** in OSI?

ASAM Quality Checker

Motivation

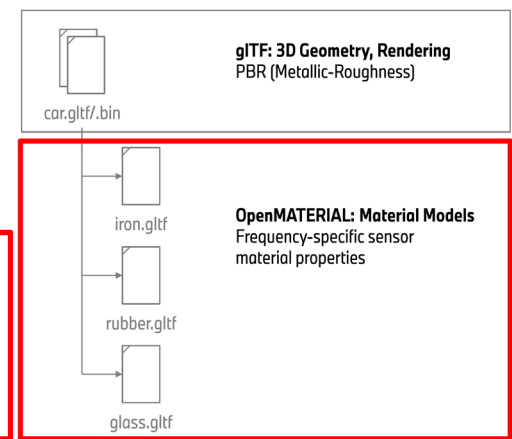


Looking Ahead: some examples



OpenMATERIAL: Asset Info & Model Specs

- Semantic Information
- Coordinate Frames
- Node Hierarchy
- Animation
- Quality Requirements
- ...



ASAM Standards Portfolio

ASAM is currently active in 7 domains

Simulation

OpenCRG OpenDRIVE OpenLABEL
OpenSCENARIO OSI

Data Management & Analysis

CEA ODS

Test Automation

ACI ASAP 3 ATX GDI iLinkRT
MCD-3 MC XIL OTX Extensions

Measurement & Calibration

ARTI CDF CMP CPX
HMS MCD-1 CCP / XCP MCD-1 POD
MCD-2 MC MCD-2 CERP MDF

Diagnostics

MCD-2 D MCD-3 D

ECU Networks

MCD-2 NET

Software Development

CC FSX ISSUE LXF MBFS MDX SCDL

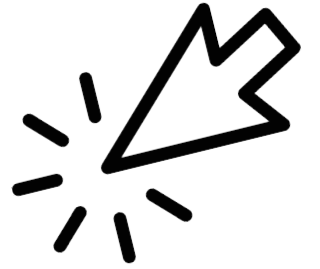


<https://www.asam.net/standards/>

References and Further Reading



**ASAM
Open-Source
Platform**



ASAM OpenDRIVE®

ASAM OpenSCENARIO® XML

ASAM OSI®

ASAM OpenCRG®

ASAM OpenSCENARIO® DSL

ASAM OpenLABEL®

ASAM Test Specification

ASAM OpenODD V1.0.0

ASAM OpenMATERIAL® & 3D model structures

ASAM Quality Checker

Thank you for your attention

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