ASAM OpenDRIVE 1.6
Release Presentation

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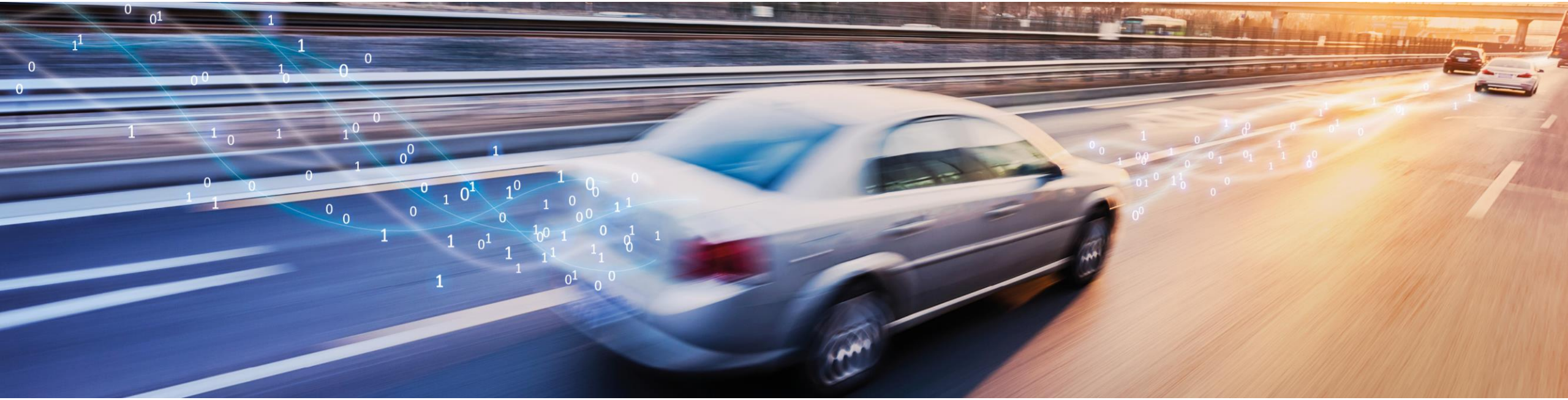

ASAM Association for Standardization of Automation and Measuring Systems

Agenda

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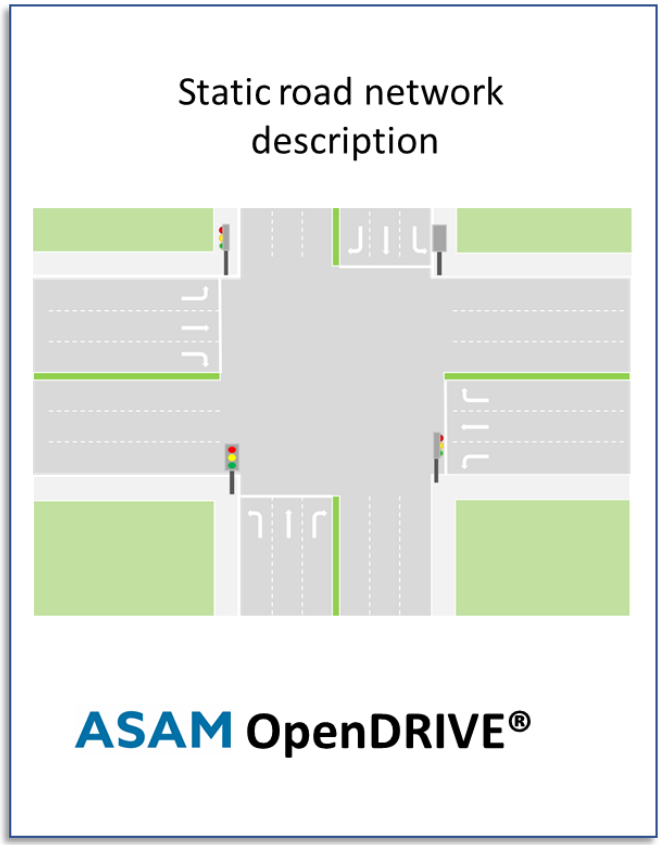
Motivation of OpenDRIVE 1.6

Aim to convert the OpenDRIVE 1.5 Standard to ASAM



- ASAM OpenDRIVE provides the exchange format specification to describe static road networks for driving simulation applications.
- The primary task of ASAM OpenDRIVE is the road description including objects along the road.
- The OpenDRIVE Specification covers the description on how to model e.g. roads, lanes, junctions.
- Dynamic content like Cars and pedestrians are not covered by ASAM OpenDRIVE.

What's new OpenDRIVE 1.6

- A UML Model has been made from the previous .xml syntax.
  - Schema and tables are now created automatically.
- The document was given a complete new clear information architecture.
- Terms have been cleaned. Many redundant terms in the explanations have been removed..
- Many inconsistencies in the documents have been removed.
- Most chapters have been completely re-illustrated
- The illustrations have been given a consistent colour coding.
- Introduction of a basic set of rules for the individual elements.
  Some rules had to be defined as recommendation due to backward compatibility reasons
- The Style Guides from VIRES, BMW and Daimler were as far as possible incorporated into the standard.

Basis for compatibility were existing and working OpenDRIVE files.
– not the OpenDRIVE 1.4 nor 1.5 schema files (these schema files contained errors)

Backward Compatibility

- OpenDRIVE 1.6 is backward compatible to OpenDRIVE 1.4 and OpenDRIVE 1.5 xml files (not the schema files).
- Issues that were deprecated for at least since OpenDRIVE 1.4 have been removed:
  - Neighbor
  - crossfall
- The following geometric definition has been defined as deprecated:
  - Cubic polynom

Deliverables

Documents

- OpenDRIVE 1.6 Specification:
  - PDF
  - HTML

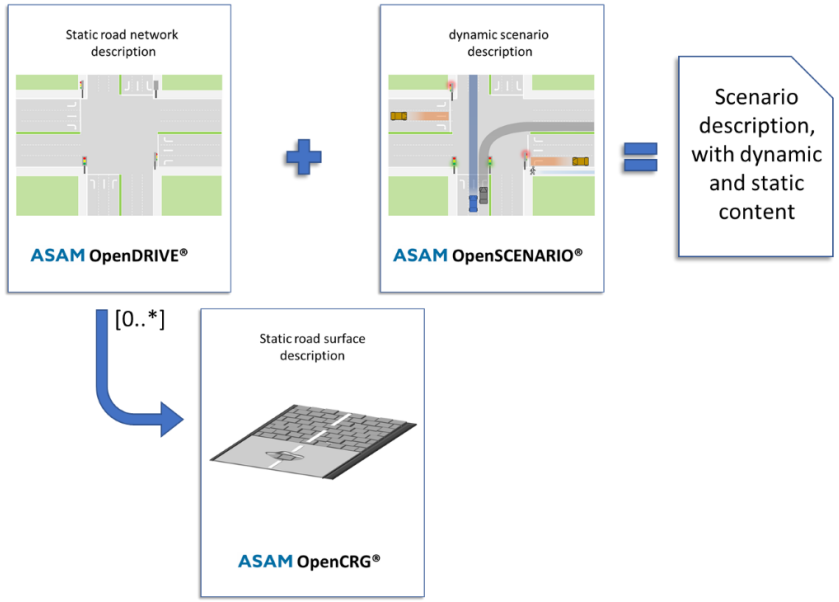
Supplementary Files

- xsd schemas
- UML Model as html Export
- Example and use case files
- OpenDRIVE Signal Catalog

Relation to other Standards

Relation of ASAM OpenDRIVE to OpenCRG and OpenSCENARIO

- ASAM OpenDRIVE defines a storage format for the static description of road networks.
- In combination with ASAM OpenCRG it is possible to add very detailed road surface descriptions to the road network.
- To add dynamic content ASAM OpenSCENARIO is needed.



Combined all three standards provide a scenario-driven description of traffic simulation that contains static and dynamic content.

Retrospective

- A lot more was done then initially expected.
- This made the time schedule very tight.
- It took a few meetings for the team members to get to know each other. We became a great team, and everyone contributed in a very constructive way to get this result.
- We had superb support from Nicco Dillmann.

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Outlook

- OpenDRIVE Concept project is planned for August 2020
- Future improvements for the next OpenDRIVE version are defined in the concept paper.
- Based on the upcoming concept paper the next project proposal can be defined.

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