ASAM
Regional Meeting North America 2021

Peter Voss
Managing Director

Oct 28, 2021
Online

ASAM Association for Standardization of Automation and Measuring Systems

Conference Call Remarks

1. Please make sure you are muted for not to disturb the presentations.

2. The meeting will be recorded and published on the ASAM website after the event. If you want to remain anonymous, please make sure to turn off your camera and ask questions only via the meeting chat.

3. For questions, please use the meeting chat: We will try to cover as many questions as possible.

4. If you have technical problems, please write into the chat or contact info@asam.net.

ASAM

Agenda
Regional Meeting North America 2021

EDT		
10:00 am	**Welcome**	Armin Rupalla (Member of the ASAM Board of Directors)

ASAM Update

10:10 am	**ASAM Update**	Peter Voss (ASAM)

Standardization Highlights

10:45 am	**ASAM OpenX Standards**	Ben Engel, Nicco Hagedorn (ASAM)
11:15 am	**Study Project Test Specification**	Ben Engel (ASAM)
11:30 am	**ASAM OpenLABEL V1.0.0**	Nico Croce (Deepen AI)
11:50 am	**ASAM MDF Image, Radar, Lidar, Sensor Logging**	Bane Strahinjic (Bosch) Tobias Langner (ETAS)
12:05 pm	Break	

Affairs North America

12:15 pm	**Perspectives on Service Oriented Vehicle Diagnostics (SOVD)**	Syed Shihab Ullah (General Motors)
12:35 pm	**Leveraging OpenDRIVE and OpenSCENARIO to connect interdisciplinary teams for automated driving**	Mark Corless, Avinash Nehemiah, John Pallag (The MathWorks)
12:55 pm	**Wrap-up**	Peter Voss (ASAM)

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ASAM Update

ASAM Update

ASAM

ASAM – We Connect People | Standards | Solutions

Standardization in Automotive Development since 1998

- **Non-profit standardization organization** within the Automotive Industry

- Focus on **implementation level standards** (rather than the process level standards of e.g. ISO/SAE)

- ASAM standards are **recommendations**, they do not have an impact on regulatory framework

- **Open, non-competitive** standard development groups

- **Membership driven** standardization projects

ASAM

Board of Directors – Term 2021 - 2023

The ASAM Board of Directors was elected this year. It consists of representatives from OEMs, tool vendors and research institutes.
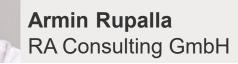
Chairman

Prof. Dr. Marcus Rieker
HORIBA Europe GmbH

Dr. René Grosspietsch
BMW AG

Prof. Dr. Frank Köster
DLR e.V.

Dr. Ralf Nörenberg
HighQSoft GmbH

Armin Rupalla
RA Consulting GmbH

ASAM

Technical Steering Committee – Term 2020 - 2022

A Highly Experienced International Team of Experts from the Automotive Industry

Gil Amid
Foretellix Ltd.

Nicola Croce
Deepen AI

Dr. Christoph Dallmayr
Vector Informatik GmbH

Armin Graf
Vitesco Technologies GmbH

Prof. Dr. Andreas Kemeny
Driving Simulation Association

Oliver Philipp
Siemens Industry Software GmbH

Stefan Romainczyk
NI

Gerald Sammer
AVL GmbH

Kilian Schnellbacher
ETAS GmbH

Michael Schwarzbach
BMW AG

Markus Steffelbauer
Softing Automotive Electronics GmbH

Dr. Jörg Supke
EMOTIVE GmbH & Co KG

Status: Oct 01, 2021

ASAM

ASAM Membership

More than 370 member organizations develop and apply ASAM standards.

Status: Nov 2021

New ASAM Members in 2021

ASAM has already gained 46 new members in 2021 alone.

EUROPE

- AED Engineering
- areus
- CarMedialab
- Digitrans
- JAGUAR
- LAND ROVER
- JOYNEXT
- KAN Engineering
- KÜBRICH Ingenieure
- m+p international
- OPAL-RT TECHNOLOGIES
- PERPETUUM PROGRESS
- plexim electrical engineering software
- Phantasma Labs
- PLC2
- PROSIG
- RAWLAB DATA EXPERTS
- RISC Software GmbH
- T-engineering
- veoneer
- vitesco TECHNOLOGIES

NORTH AMERICA

- excelfore Accelerating Vehicle Data Services
- RIDECELL
- rydesafely
- Simma Software
- VTT

REST OF ASIA

- ANCIT CONSULTING
- VISHNU B V Raju Institute of Technology
- iVH Institute of Vehicle Engineering
- MORAI
- OptoLiv
- STARMATA

CHINA

- Baidu 百度
- Baidu 百度
- 河海大学 HOHAI UNIVERSITY
- CAIC 中汽创智 CHINA AUTOMOTIVE INNOVATION CORPORATION
- CAICT
- CICV 国汽智联
- 吉林大学 Jilin University
- 均胜电子 JOYSON ELECTRONICS
- NIO
- 深圳车小米智能网络科技有限公司
- SIAT

JAPAN

- aptpod
- DNV
- NEXTY Electronics
- SC-ABeam Automotive Consulting

Status: Nov, 2021

ASAM

North American ASAM Members

Currently ASAM has 37 members in North America – and the number is increasing…

OEMs

Ford   GM   JOHN DEERE

Tier-1 Suppliers

APTIV   Cummins   DETROIT   NVIDIA   unity

Tool Vendors / Service Providers

12TH WONDER   ALPHA DRIVE   amazon   Ansys   Applied Intuition   ATI   CONTROLTEC   DASSAULT SYSTEMES   deepen   DERIVE   EDGE CASE RESEARCH

excelfore   MathWorks   MECALC   Mechanical Simulation (carSIM truckSIM bikeSIM)   monoDrive   ni   RIDECELL   rydesafely   SGS   SIBROS   Simma Software

Typhoon HIL   Uber ATG   VTT   white pine

Universitys & Research Institutes
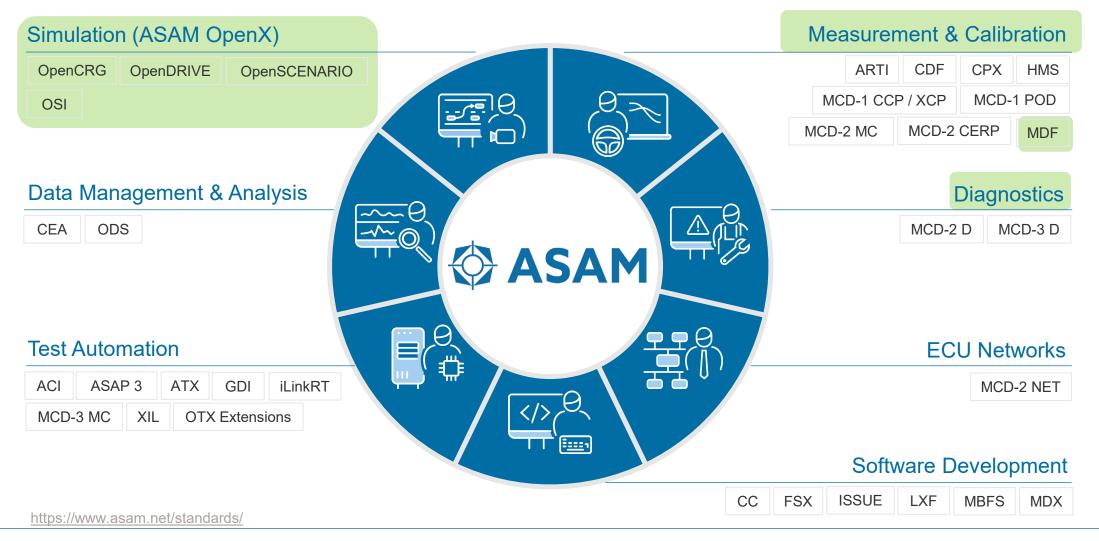
M STATE   THE OHIO STATE UNIVERSITY   TRC Transportation Research Center Inc.

Status: Oct 26, 2021

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ASAM Update

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ASAM Standards Portfolio

ASAM is currently active in 7 domains

Simulation (ASAM OpenX)

OpenCRG	OpenDRIVE	OpenSCENARIO
OSI		

Measurement & Calibration

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

Data Management & Analysis

CEA	ODS

Diagnostics

MCD-2 D	MCD-3 D

Test Automation

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

ECU Networks

MCD-2 NET

Software Development

CC	FSX	ISSUE	LXF	MBFS	MDX

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

ASAM

ASAM Development

From the First Idea to the Publication of a Standard

Member Initiatives
Study Groups
Concept Projects
Market Surveys, ...

IDEATION

PROPOSAL &
ENROLLMENT

Proposal Workshop
Decision by the TSC

DEVELOPMENT

Public Draft Review
Feeback Processing

REVIEW

Release Decision

RELEASE

Publication of
the Standard

Guiding Principles:

- Member-driven
  Initiatives and decisions are taken by the member companies.

- Open exchange
  ASAM requests open exchange among all stakeholders.

- Domain expertise
  ASAM has a global network of domain experts to develop standards

- Flexible processes
  ASAM has lean yet flexible process structures leading to short development times

- Project support
  Experienced Technology Managers support the working groups
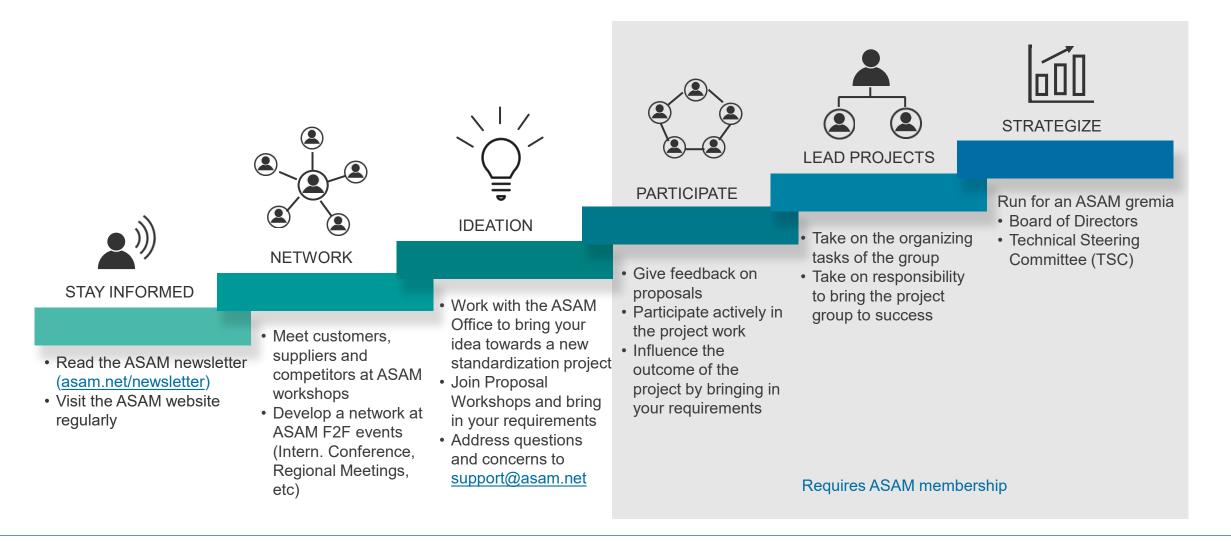
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How To Get Involved In ASAM

There are differnet levels of getting involved with ASAM, depending on your time and needs.

STAY INFORMED
- Read the ASAM newsletter (asam.net/newsletter)
- Visit the ASAM website regularly

NETWORK
- Meet customers, suppliers and competitors at ASAM workshops
- Develop a network at ASAM F2F events (Intern. Conference, Regional Meetings, etc)

IDEATION
- Work with the ASAM Office to bring your idea towards a new standardization project
- Join Proposal Workshops and bring in your requirements
- Address questions and concerns to support@asam.net

PARTICIPATE
- Give feedback on proposals
- Participate actively in the project work
- Influence the outcome of the project by bringing in your requirements

LEAD PROJECTS
- Take on the organizing tasks of the group
- Take on responsibility to bring the project group to success

STRATEGIZE

Run for an ASAM gremia
- Board of Directors
- Technical Steering Committee (TSC)

Requires ASAM membership

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Release and Project Roadmap 2021

Four completely new standards released and many further new standards started

Releases *
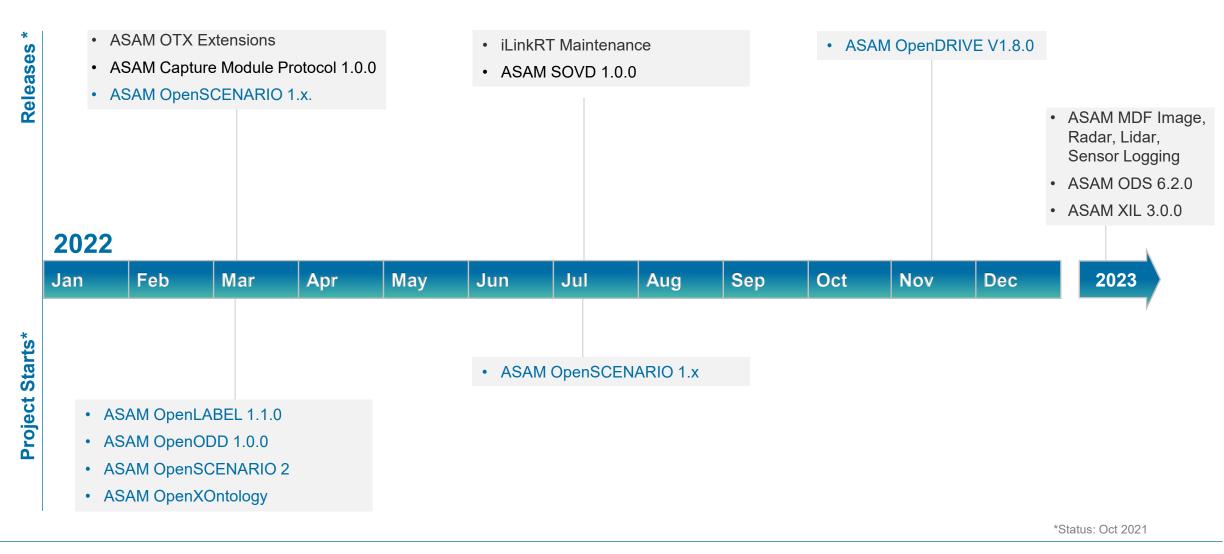
- **Concept Project** ASAM XIL SOC
- ASAM OpenDRIVE 1.6.1
- ASAM OpenSCENARIO 1.1.0
- ASAM OSI 3.3.0

- ASAM MCD-1 XCP: SW Debugging 1.1.0
- ASAM ODS 6.1.1
- ASAM OpenDRIVE 1.7.0

- ASAM OpenSCENARIO 2.0
- ASAM OpenXOntology 1.0.0
- **Study Project:** ASAM Test Specification

- ASAM SCDL 1.0.0
- ASAM OpenLABEL 1.0.0
- ASAM OSI 3.4.0
- **Concept Project:** ASAM OpenODD

2021

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Project Starts*

- ASAM XIL 3.0.0

- ASAM MDF Image, Radar, Lidar, Sensor Logging
- ASAM ODS 6.2.0
- ASAM OpenSCENARIO 1.x

Study Group Test Specification

- Capture Module Protocol 1.0.0
- OpenDRIVE V1.7.0 | V1.8.0

*Status: Oct 2021

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Release and Project Roadmap 2022

Further completely new standards are underway.

Releases *

- ASAM OTX Extensions
- ASAM Capture Module Protocol 1.0.0
- ASAM OpenSCENARIO 1.x.

- iLinkRT Maintenance
- ASAM SOVD 1.0.0

- ASAM OpenDRIVE V1.8.0

- ASAM MDF Image, Radar, Lidar, Sensor Logging
- ASAM ODS 6.2.0
- ASAM XIL 3.0.0

2022

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2023

Project Starts*

- ASAM OpenSCENARIO 1.x

- ASAM OpenLABEL 1.1.0
- ASAM OpenODD 1.0.0
- ASAM OpenSCENARIO 2
- ASAM OpenXOntology

*Status: Oct 2021

ASAM

Our Technical Team provides support for all ASAM project groups

Simulation Domain

Stefan Cyliax
Global Technology Manager
Phone: +49 170 9213579
Email: stefan.cyliax@asam.net

Responsibilities:
- ASAM OpenSCENARIO 1
- ASAM OSI

Ben Engel
Global Technology Manager
Phone: +49 151 61645936
Email: benjamin.engel@asam.net

Responsibilities:
- ASAM OpenSCENARIO 2
- ASAM OpenXOntology
- ASAM Test Specification

Nicco Hagedorn
Global Technology Manager
Phone: +49 160 99218048
Email: nicco.hagedorn@asam.net

Responsibilities:
- ASAM OpenCRG
- ASAM OpenDRIVE
- ASAM OpenLABEL
- ASAM OpenODD

Classic Domains

Bernd Wenzel
Senior Technical Consultant
Phone: +49 371 5607742
Email: bernd.wenzel@asam.net

Responsibilities:
ASAM Classic Domains:
- Measurement & Calibration
- Diagnostics
- ECU Networks
- Software Development
- Test Automation
- Data Management & Analysis

Technical Writer
Christian Gödert
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Email: christian.goedert@asam.net

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ASAM Update

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Some Highlights

ASAM actively drives its evolution – inside and outside.

New Standards Related Activities

Domain Simulation

- New domain Simulation well established, high interest worldwide
- Very active domain: so far, 5 standard releases and 3 concept releases since the transfer in 2019
- Currently 9 running projects in the domain (development / concept / study projects)
- Completely new standard ASAM OpenLABEL will be released in Nov 2021
- Additional staff was hired early this year to support the OpenX project groups

Classic Domains

- Also, very high interest in standards development projects with great numbers of participating companies
- 2 completely new standards since 2019: ASAM iLinkRT (2019), ASAM HMS (2020)
- 3 completely new standards underway: ASAM SCDL (Nov 2021), ASAM CMP (Mar 2022) and ASAM SOVD (Jul 2022)
- Classic standards adapted to new technologies used in AD (e.g. ASAM MDF: Image, Radar, Lidar, Sensor Logging;   ASAM XIL: Service Oriented Communication, etc.)

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Some Highlights (Last Twelve Months)

ASAM actively drives its evolution – inside and outside.

Next Steps towards Internationalization

- Today, ASAM has members in 29 countries

- First ASAM members in Canada, Croatia, Romania, Slovenia, Spain, Turkey, ….

- North America:
  High interest in North America. Active participation in the development of standards in the domains of Simulation and Diagnostics

- China: Successful local entry (C-ASAM), first Regional Meeting China in Nov 2020

- Korea: We see a great interest and many questions lately

- Japan: Very strong community with many local projects and local involvement in international projects

- 2nd completely new standard developed in Japan will be released in Nov 2021 (ASAM SCDL)

Some more Highlights …

ASAM actively drives its evolution – inside and outside.

ASAM has become a recognized partner in the standardization community

- Several Liaison Agreements with ISO (SC5, WP 9, …)

- MoU with SAE, discussions in the area of ADAS/AD

- Attendee Agreement with AUTOSAR, regular meetings, common presentation at AUTOSAR Open Conference 2021 (on XIL, SOVD, OSI, …)

- Eclipse Foundation: discussions on common activities in OpenX

- Several introductory calls with IEEE

- Observer seat at IAMTS Executive Committee, collaboration with WG's

- MoU with CITA (International Motor Vehicle Inspection Committee)

Associate partner in several government funded projects

Actually, involved in KIsSME, NFID4MobilTech, GAIA-X, ... other projects in discussion

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ASAM in North America

Strong interest in ASAM OpenX standardization

Important new members from North America with **high interest in ASAM OpenX** standards development

USA members actively involved in standards development:

Active participation:

- ASAM SOVD: Ford GM
- ASAM OpenX: Ansys APTIV deepen EDGE CASE RESEARCH MathWorks NVIDIA RIDECELL

Project Lead: ASAM ODS: ni

ASAM OpenLABEL: deepen

TSC Participation: deepen

ASAM in Japan

In the Driver Seat for International Standard Development Activities

ASAM Hex File Management 1.0.0
- First ASAM Standard completely developed outside of Europe (project lead: Honda)

ASAM SCDL 1.0.0 (Safety Concept Description Language)
- Proposal Workshop end of January 2020
- Proposal was approved at the TSC meeting in May 2020
- Standard release planned in November 2021

ASAM ODS and ASAM XIL **Study Groups** active

Regular meetings of **Motorcycle OEM** group

Regional Meeting Japan 2021 in Tokyo (online)
with more than 150 participants!

ASAM **OpenDRIVE Concept WP4** (International Traffic Signs)
- Driven by a dedicated workgroup in Japan (project lead: Mitsubishi Precision)

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C-ASAM

A Common Initiative between Automotive Data of China (Tianjin) Co., Ltd. and ASAM e.V.

Tasks of the C-ASAM Working Group:

- Promote interest in ASAM and its standards within the local automotive industry
- Accompany local companies in the use of ASAM standards
- Hold trainings on ASAM standards
- Drive the acquisition and integration of Chinese ASAM members
- Start local and international development of ASAM standards in China

Achievements:

- C-ASAM Website was launched in November 2020
- First Regional Meeting China in November 2020
- First Advisory Committee Meeting in December 2020
- Chinese translations of ASAM OpenDRIVE, ASAM OpenCRG and ASAM OpenSCENARIO available
- C-ASAM presence at local exhibitions
- As of today, 37 Chinese ASAM members (no. 3 worldwide)

Inaugural Ceremony, Chengdu, Sept. 27, 2019

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ASAM Update

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ASAM Online Events

Services for our members

ASAM is hosting many events online giving international members the chance to take part:

ASAM Technical Seminar and General Assembly:

- Online events such as the Technical Seminar are very successful (2021: more than 220 participants dialed in)
- **Technical Seminar 2022** will be held in conjunction with the ASAM General Assembly 2022 on Mar 23 - 25 (both online). The TSC elections are held online as well
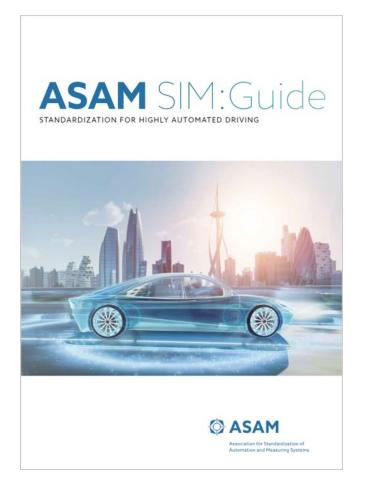
Online offers a variety of new formats

- **Webinars** are now an integral part for ASAM marketing to present the ASAM standards and demonstrate their application
- **Project work** opens up for international participants as many meetings can be held online
- Active usage of **Social Media** increases the reach of ASAM

ASAM SIM:Guide

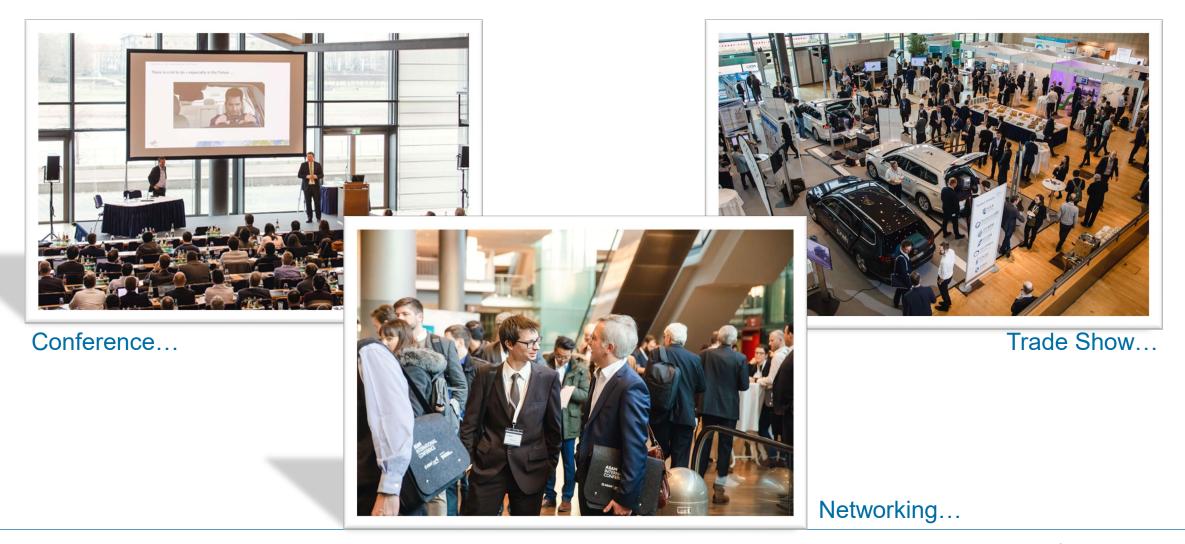Standardization for Highly Automated Driving

The guide contains

- Introduction to the ASAM domain "Simulation"

- All current standardization activities by ASAM in the domain

- Current standardization activities outside of ASAM
  -> places the ASAM OpenX standards in the larger context
     of a global standardization landscape

- Application stories from our members
  -> how do our members use the OpenX standards
  -> how have these standards helped to improve processes
  -> how are they facilitating customer projects

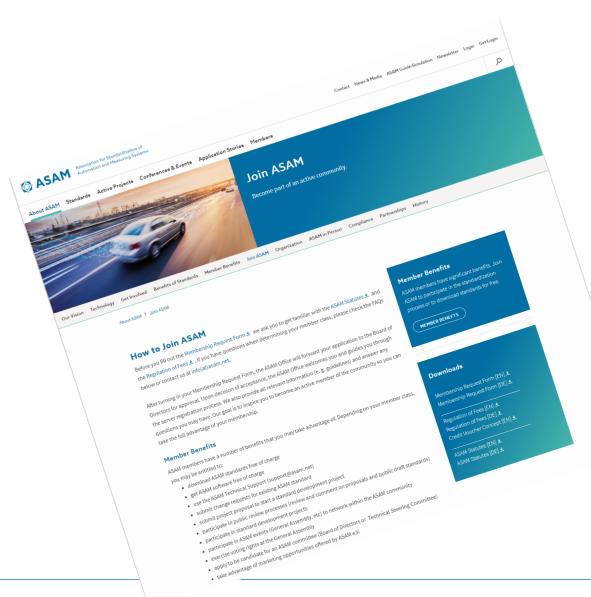**Download copy today:**
www.asam.net/asam-guide-simulation

ASAM International Conference 2022

In 2022, ASAM will hold its 5th International Conference as a face-to-face meeting

Conference…

Trade Show…

Networking…

ASAM

Join ASAM

Join ASAM and get actively involved, start to influence and benefit from networking with the ever-growing domain experts within the ASAM community.

If you are interested:

- Visit Join ASAM on our Website www.asam.net
  - OR
- Send us an Email to info@asam.net

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ASAM