## **ASAM**

## Regional Meeting North America 2020

October 29, 2020 Zoom Meeting



#### **ASAM**

Who we are and what we do

- 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

# **Organizational Development**



#### Board of Directors - Term 2019 - 2021

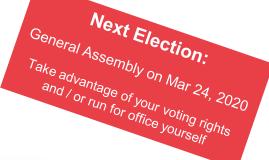
Voluntary Representatives from International Tier-1s, Tool Vendors and Research Institutes

- Prof. Dr. Frank Köster
   DLR
- Dr. Ralf Nörenberg HighQSoft GmbH
- Prof. Dr. Marcus Rieker, Chairman HORIBA Europe GmbH
- Armin Rupalla
   RA Consulting GmbH
- Richard Vreeland Cummins Inc.















## **Technical Steering Committee – Term 2020 - 2022**

A Highly Experienced International Team of Experts from Automotive Industry



Gil Amid Foretellix Ltd.



Nicola Croce Deepen Al



Dr. Christoph Dallmayr Vector Informatik GmbH



**Armin Graf**Vitesco Technologies
GmbH



**Prof. Dr. Andras Kemeny**Driving Simulation
Association



Oliver Philipp Siemens Industry Software GmbH



Stefan Romainczyk National Instruments



**Dr. Gerald Sammer** AVL List GmbH



Kilian Schnellbacher ETAS GmbH



Michael Schwarzbach BMW Group



Markus Steffelbauer Softing Automotive Electronics GmbH

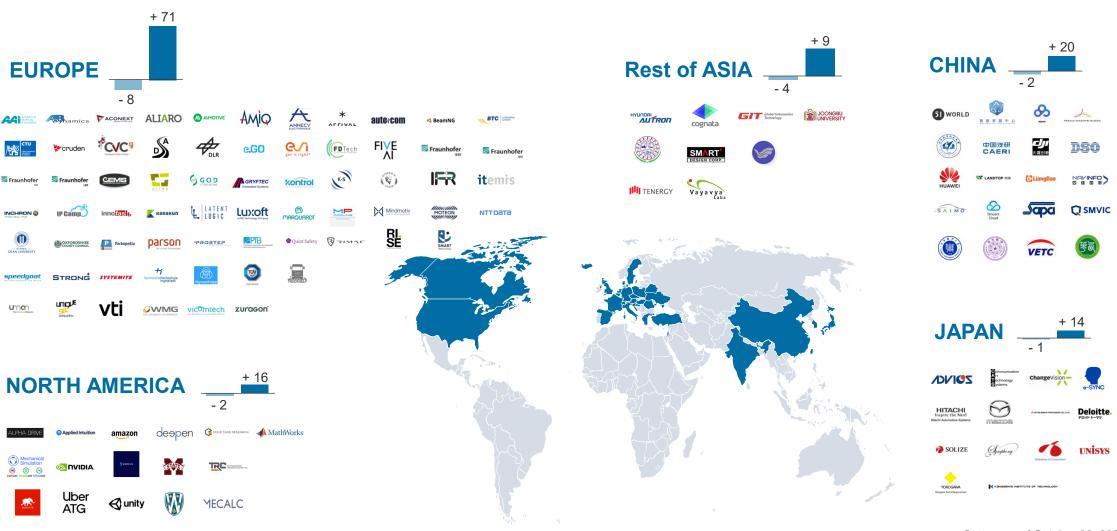


Dr. Jörg Supke EMOTIVE GmbH & Co KG



### **New ASAM Members**

130 new ASAM Members since January 2019, thereof 75 New Members in 2019!



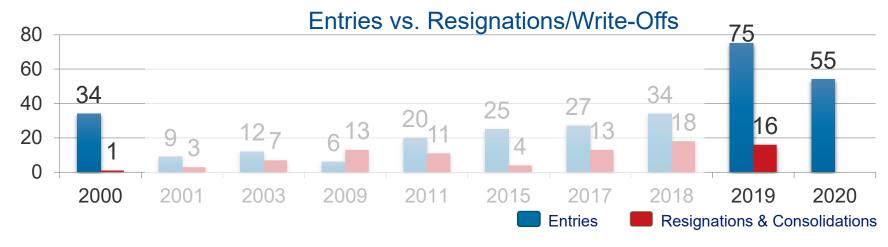
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## **Membership Development**

New Members: 220% Growth Rate in 2019!





## **ASAM Membership**

More Than 330 Member Organizations Develop and Apply ASAM Standards





## **Some Highlights (Last Twelve Months)**

ASAM actively drives its evolution – inside and outside

- New Standards Related Activities
  - New domain "Simulation" established, high interest worldwide
  - Five ASAM OpenX projects identified in Jan. 2019, first two releases in March 2020
  - Currently, 7 OpenX projects running
  - First standard development outside Europe, released in May 2020
- Next Steps towards Internationalization
  - Local entry in China (C-ASAM)
  - Re-vitalization of North American Activities
  - Requests from Korea
  - First ASAM members in Canada, Croatia, Israel, Romania, Slovenia, Spain, Ukraine, Turkey....
- Services for ASAM members worldwide (members in 29 countries)
   ASAM International Conference 2019, ASAM General Assembly 2020 (online), ...
- A Recognized Partner in the Standardization Community
   Liaison Agreements with ISO, MoU with SAE, AUTOSAR Attendee Agreement, ...





#### **ASAM in North America**

High Interest in ASAM OpenX Standardization

Despite the overall Corona situation (no possibility to travel to USA in 2020)

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

#### **ASAM OpenX Workshops in 2019**

- February at Carnegie Mellon University, Pittsburgh (organized by ANSYS)
- August organized together with Center of Automotive Research (Ohio State University)
- October parallel to "Automotive Testing Expo"

#### Regional Meeting North America 2019 in Detroit

#### Collaboration with SAE

- Intensive discussions on expert level
- Presentation at SAE World Congress last April (cancelled)
- Presentation at SAE Webinar (AVSC)
   "Standardization for Automated-Vehicle Testing and Simulation"
- Common AV Taxonomy (discussion with AVSC/ORAD)





### **North American ASAM Members**

Currently 34 Members

**OEMs** 





Tier-1 Suppliers







**Tool Vendors / Service Providers** 





















































Academia











Status: as of October 22, 2020



## **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

Discussions of ASAM MCD-2 MC 1.7.1 extensions

ASAM ODS and ASAM XIL Study Groups

Regular meetings of **Motorcycle OEM** group

Regional Meeting Japan 2020 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)



#### **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 (project lead for ASAM OpenSCENARIO 1.X)

Welcome to join ASAM in China via C-ASAM!

**Currently, 23 ASAM members in China** 



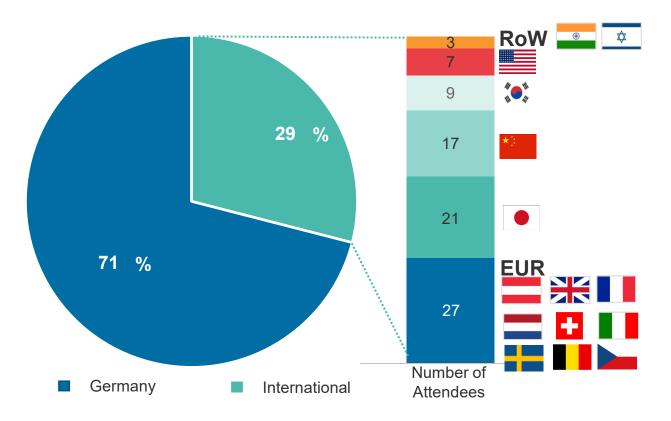
Inaugural Ceremony, Chengdu, Sept. 27, 2019



## ASAM International Conference 2019 - Dresden, Dec. 10-11, 2019

"Standardized Virtual Development as a Key to Future Mobility"

#### Attendees (n=296)







## **Standardization Activities**



#### **ASAM Standards Portfolio**

Currently seven Domains (Status October 2020)





## Release and Project Roadmap for 2019

A First OpenX Standards under Development



#### Releases

- ASAM ASAP-3 3.0.0
- ASAM iLinkRT 2.0.0

• ASAM MDF 4.2.0

#### **Project Starts**

- OpenDRIVE Transfer
- OpenDRIVE Concept
- OpenSCENARIO Transfer
- OpenSCENARIO Concept
- ASAM iLinkRT 3.0.0
- ASAM Runtime Interface (ARTI)

ASAM SOVD

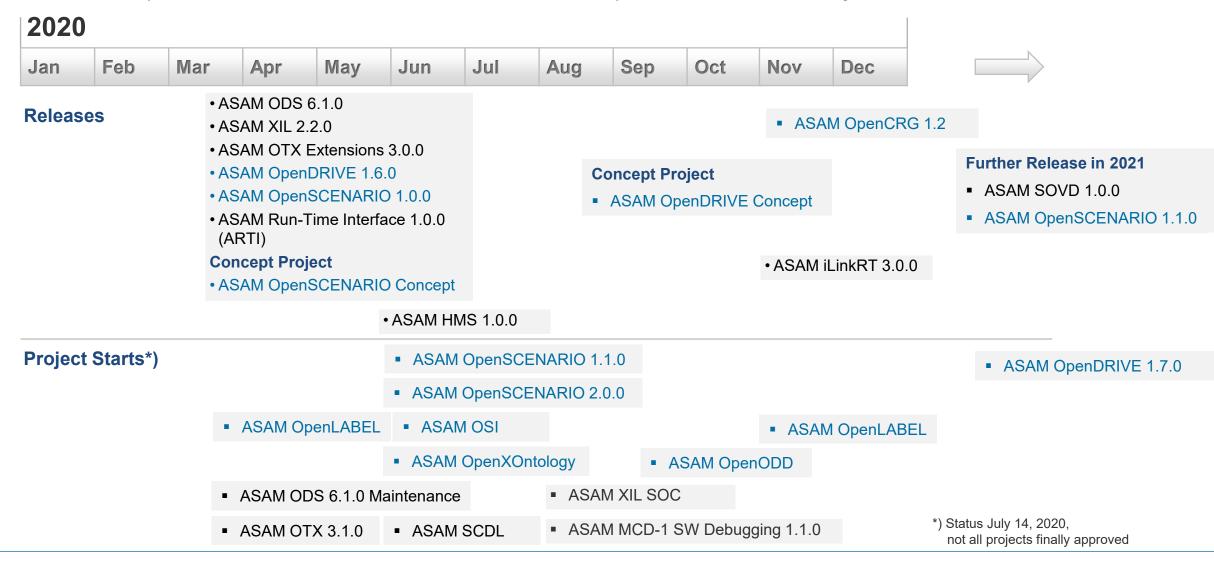
ASAM OpenCRG

 ASAM OTX Extension/ Core Rework



### Release and Project Roadmap for 2020

First ASAM OpenX Standards Released, New Standard Development Methods, Possibly a New Domain





## **ASAM OpenX: Overview**

Current and Future Standards Portfolio

#### **OpenSCENARIO**

Dynamic scene description

#### **OpenDRIVE**

Static road network

#### **OpenCRG**

Detailed Road surface description

#### Open Simulation Interface (OSI)

Generic interface between sensor models & ground truth

#### **OpenLABEL**

Object and scenario labelling format

#### OpenODD

ODD description format

#### OpenXOntology

Extendable domain ontology for OpenX



## **Services for ASAM Members**

Website, conferences, ...



### **ASAM Office**

#### A New Active Team "At Your Disposal" – At Any Time

#### Staff



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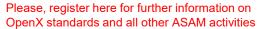


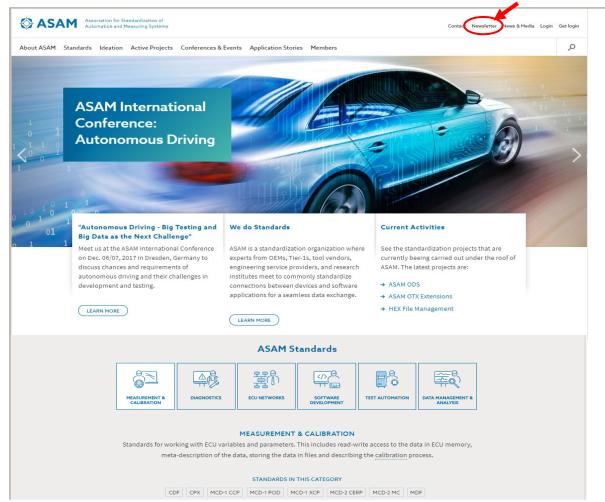
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## **ASAM Website www.asam.net**

Comprehensive Information about ASAM – Accessible for Everybody







# Thank you!

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For more information on ASAM visit

www.asam.net

