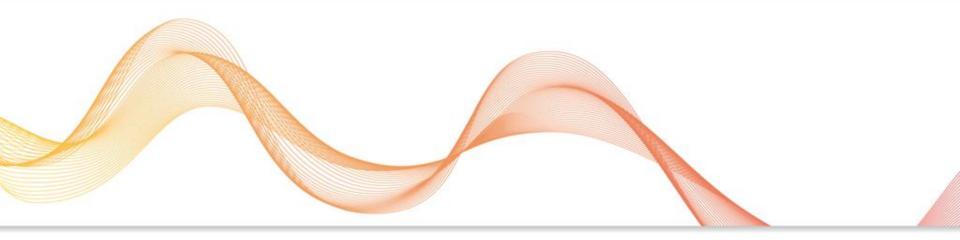


Association for standardisation of automation and measuring systems



# **Release Presentation**

### ASAM AE MCD-2 NET FIBEX 4.1.2

Data Model for ECU Network Systems Field Bus Data Exchange Format

2017 / 06 / 28



### **Deliverables**

- New Base Standard FIBEX\_V4\_1\_2.pdf
- XML schema and example files
- HTML documentation
- Baseline
- Release notes



# Introduction

- During the implementation of ECU software, the correct configuration of the operating system's network stack is a fundamental requirement in ensuring the interoperability of ECUs within automotive networks.
- The configuration includes the definition of
  - · exchanged signals,
  - · datatypes,
  - and their explicitly defined declarations for various automotive communication systems.
- This information is typically provided in interface descriptions created by OEMs and forwarded to their ECU suppliers.
- The ASAM MCD-2 NET standard (called FIBEX) provides a uniform, XML-based interface description for configuring the software of automotive networks.



## Introduction cont.

- The standard allows the definition of network topologies, consisting of ECUs with network ports and gateways.
- The standard consists of a generic interface description and technologyspecific extensions for FlexRay, MOST, CAN, TTCAN, LIN and Ethernet.
- Technology-specific properties are described for each network port. For example, addresses as well as transport protocols and the reserved ports are described for Ethernet and IP.
- Furthermore, the interface description contains a list of sent and received signals for each ECU. In the case of service-oriented communication, service provider instances and consumers are listed for each ECU.

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### What's New? Changes from FIBEX 4.1.1 to 4.1.2

#### Small Extensions

ASAM

- · Support for arrays with minimum length of 0
- · Allow to describe whether byte order mark is used for strings
- · Add name details for identifiable elements

#### New Features / AUTOSAR harmonization

- · Specification of service discovery configuration
- · Allow to specify that eventgroups are transferred via multicast communication
- · Inheritance of serialization attributes / serialization attributes for methods
- · Allow data Ids for complex datatype members and parameters
- · Specification of timing parameters for events and methods
- · Configuration of SOME/IP transport protocol
- · Configuration of CAN-FD

#### Clarifications

Usage of strings



# Compatibility

#### FIBEX

• The changes are compatible with FIBEX 4.1.2.

#### AUTOSAR

 Compatible to Classic AUTOSAR 4.3 / Adaptive AUTOSAR R03-17 / AUTOSAR Foundation 1.1

#### HDO (Harmonized Data Objects)

Compatible to HDO 1.1.