



AHK meets AUTOSAR

Automotive Software Development and Functional Safety

Rinat Asmus, AUTOSAR Chairperson

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Virtual Event Series

Part 2/3

BMW Group



BOSCH

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DAIMLER



TOYOTA

VOLKSWAGEN
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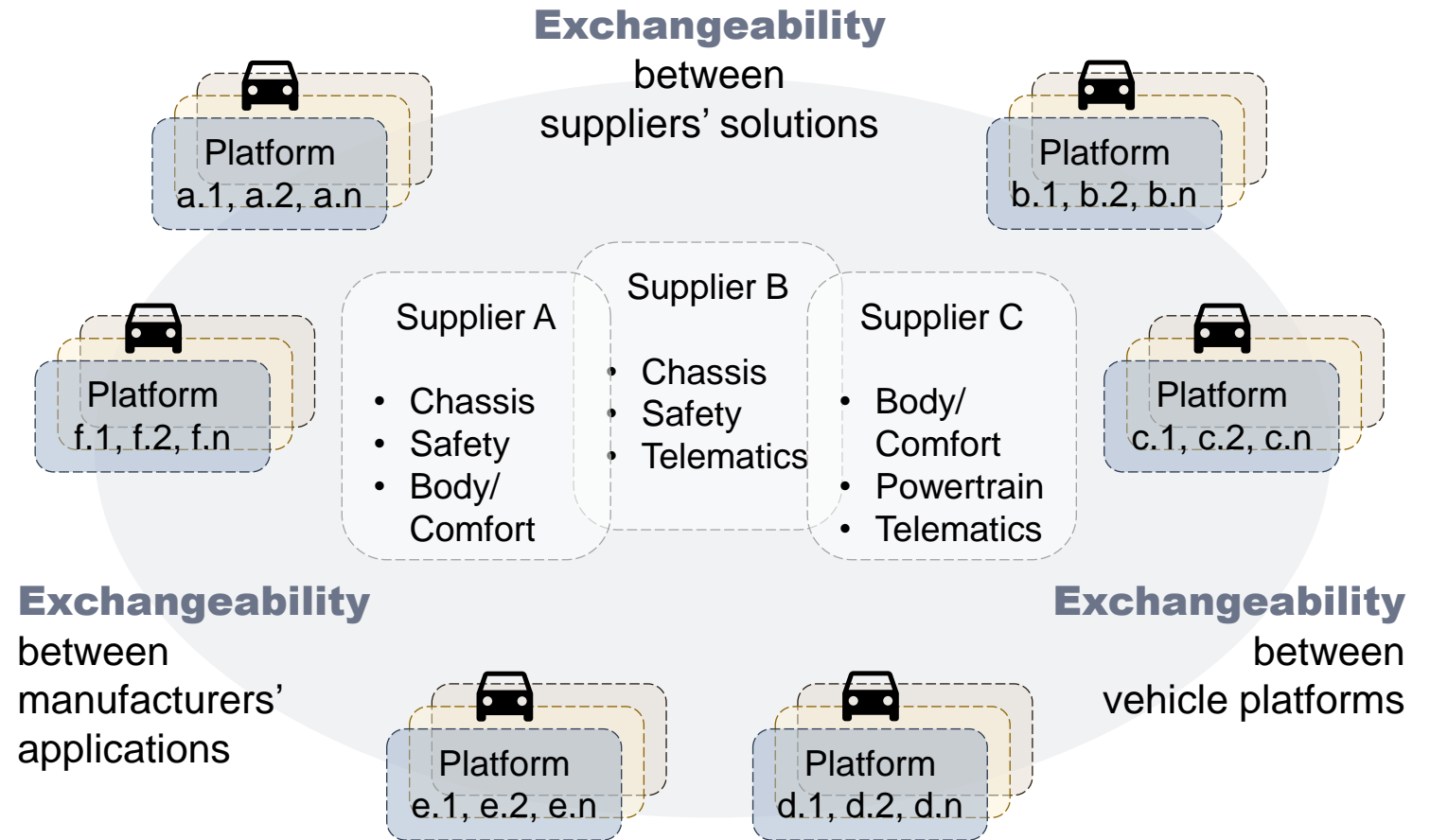
AUTOSAR Partnership

The Collaboration Model With Proven Track Record

AUTOSAR has succeeded in **bringing together main players** in automotive E/E system development **to form a powerful standard** that is successfully used all **around the world**

AUTOSAR Basic Principle

AUTOSAR ensures an advanced complexity management of integrated E/E architectures through increased **reuse** and **exchangeability of software modules** between OEMs and suppliers.



AUTOSAR

The Advantage of a Strong Community

31 international automotive OEM are AUTOSAR partners.

21 are **under the 22 top-selling OEM** and covering around **80%** of the **total market revenue** in 2019*.

Together with other Tier1 and Suppliers, our partners are collaborating to shape Future Intelligent Mobility.



Around 297 AUTOSAR Partners

9 Core Partners



59 Premium Partners



1 Strategic Partner

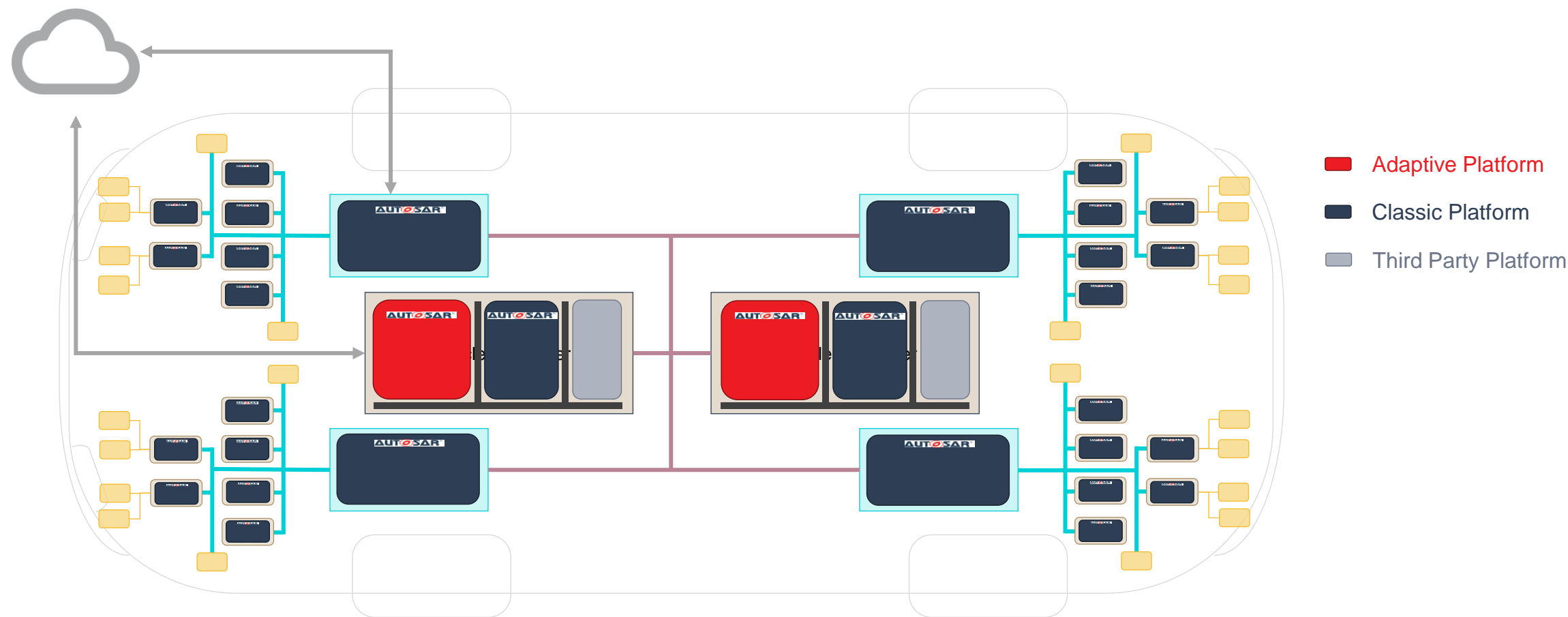


56 Development Partners



+ 145 Associate Partners
+ 27 Attendees

Zone Architecture Supported by AUTOSAR



AUTOSAR Adaptive and Classic Platform

What Are the Differences?

Adaptive



Mid, in the range of milli-seconds

High, at least ASIL-B

High, > 20.000 DMIPs

Classic



High, in the range of micro-seconds

High, up to ASIL-D

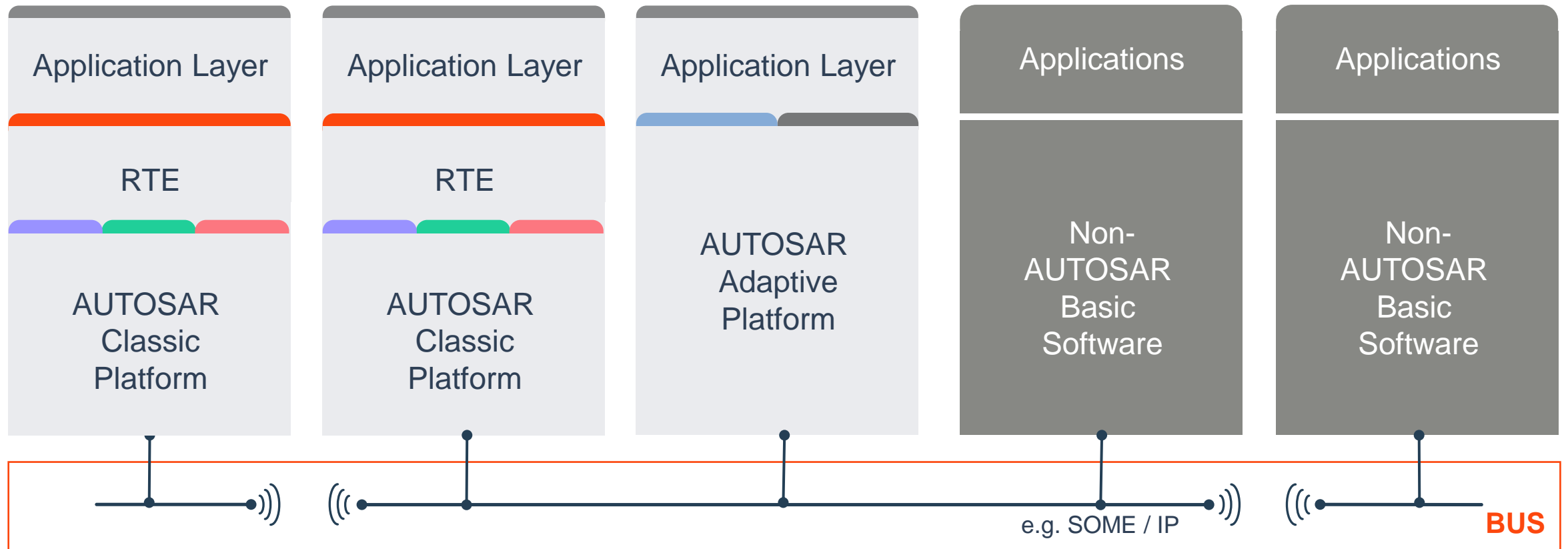
Low, ~ 1000 DMIPs

Real Time
Requirements

Safety
Criticality

Computing
Power

AUTOSAR standardizes two software platforms – Classic and Adaptive

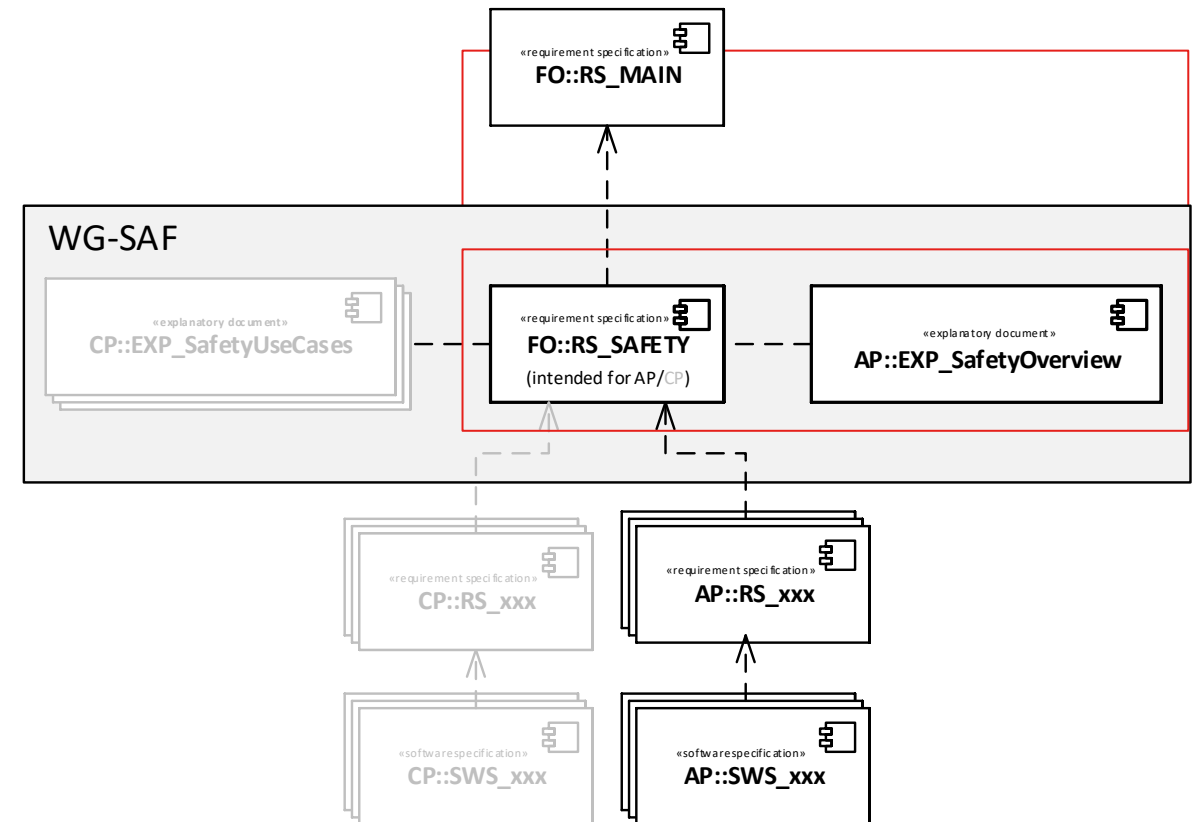


Common Bus Interface Specification

Concept in R20-11: RS_Safety

Document structure and proposed traces

- Develop, collect and maintain safety requirements in a requirements specification document for the AUTOSAR platforms
 - AUTOSAR Foundation (FO)
 - AUTOSAR Adaptive Platform (AP)
 - AUTOSAR Classic Platform (CP)
[not for R20-11]
- From the intended use of the AUTOSAR Platforms (CP and AP) and RS_MAIN, Functional Safety Requirements (FSR) and Technical Safety Requirements (TSR) are derived.



User Benefit:



The single most important document for AUTOSAR Functional Safety Engineers

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