OPEN SOURCE RELEVANT INITIATIVES

Criteria/ consortium	AUTOSAR	SOAFEE	ECLIPSE SDV	RED HAT
GOAL	• **Standardized software** framework and architecture through **specifications** for automotive	• **Cloud-native architecture** with corresponding open-source **reference implementations**	• **Open technology platform** including open-source, modular SW and frameworks	• **Linux-based in-vehicle platform,** ASIL-compliant open source
OPEN SOURCE STRATEGY		• **Open-source** as a **reference implementation** allows collaboration and early prototyping using a SOAFEE framework	• **Open-source SW and standards** for **In-Car** SW stack, **Cloud** backend and associated **tooling**	• **Open source** versions of **kernel and core products** with "enterprise-ready" business model
OPEN ARCHITECTURE	• Open **architecture for members**	• **Arm related Software architecture** for prototypes (updateable)	• **External components** from various providers can be integrated in **different architectures**	• **Linux based open architecture**
SOFTWARE STACK	• **Implemented** by **members**	• **Blueprints** on a **functional level** based on use cases	• **Overall governance** allows **community** to create and build projects	• **Supports open-source** projects and provides enterprise-grade support
DOMAIN INFRASTRUCTURE	IVI ☐ ADAS/AD ☑ EV ☑ Body ☑	IVI ☑ ADAS/AD ☑ EV ☐ Body ☐	IVI ☑ ADAS/AD ☑ EV ☑ Body ☑	IVI ☑ ADAS/AD ☑ EV ☐ Body ☐
SECURITY & SAFETY	• Safety & security are **focused in the specifications**	• Safety & security are **key requirements** for the architecture	• **Developed** by communities and **supported** by Eclipse SDV	• Linux is **certified security** proofed platform, ASIL Certification targeted
CLOUD	• Cloud interoperability via joint activity by AUTOSAR and COVESA (announced 04/23)	• **Cloud based orchestrator** (digital twins, dynamic management cloud - vehicle, tooling)	• Develop and support **cloud-native technologies**	• **Cloud-native development platform** (Cloud-Edge-Vehicle platform)
BUSINESS MODEL	• **Non-profit organization**; Members with own licence business model for implementation	• **Business opportunities** in **SDV** and **Ecosystems** on **Arm**	• **Non-profit organization**, financed through members and user community	• Flexible **Subscription-based licensing models** for lifetime and lifecycle **maintenance** , Enterprise services and SLA
OEM USAGE	• Widely **implemented** state of the art solution (> 20 OEM partner)	• **Requirements** from OEMs on architecture level	• Large **development** community with several OEMs and 1-Tiers	• One **committed** customer • In the funnel: multiple OEMs across Europe, Japan and China
OEM BENEFIT	• **Independent** of suppliers • High maturity because of wide OEM usage	• Use of an **existing framework**	• Use of **open source components**	• **Subscription based services** and maintenance
METHODS, TOOLS & PROCESSES	• Provides a **standardized infrastructure and methodology** for automotive software development.	• **Priority tooling** for SOAFEE **framework and architecture** in line with Open Cloud Initative	• Some active **projects in place**	• Provides **safety-certified tools & infrastructure**
MAINTENANCE & GUARANTEE	Maintenance ☐ Guarantee ☒	Maintenance ☒ Guarantee ☒	Maintenance ☒ Guarantee ☒	Maintenance ☑ Guarantee ☐