



Welcome to the Eclipse SDV  
Community Meetup in Yokohama  
hosted by Bosch



# contact persons during the event



**Yasuhiro Morita**

Bosch



**Ansgar Lindwedel**

Eclipse Foundation





# Building worldwide ecosystems and why open source might not be enough





**Ansgar Lindwedel**

Eclipse Foundation

Director SDV Ecosystem Development



# Introduction: Eclipse Foundation

# 5 important dates of the Eclipse Foundation

2001

IBM publishes the **Eclipse IDE as an open source**

IBM、オープンソースとして Eclipse IDE を発表

2004

Stakeholders want a **vendor-neutral governance**: creation of the Eclipse Foundation Inc

ベンダー中立のガバナンスを求めるステークホルダーの要望により、Eclipse Foundation Inc. 設立

2012

Creation of **working groups** to organize collaboration: creation of the Eclipse IoT WG Group

協業体制を整えるため、Eclipse IoT ワーキンググループ設立

2013

**Eclipse Foundation Europe GmbH** established to provide services to European ecosystem

欧州におけるエコシステムへのサービス提供のため、Eclipse Foundation Europe GmbH 設立

2021

Eclipse Foundation moves to **Europe**: creation of **Eclipse Foundation AISBL**

Eclipse Foundation、欧州への移行により Eclipse Foundation AISBL 設立

# We host a broad spectrum of industry collaborations

## Open Source Java



## Automotive & Mobility



## Embedded & IoT



## Next Gen Tooling



## Emerging Collaborations



## Eclipse Foundation



Governance & Processes

ガバナンス  
& プロセス管理



IP Management & Licensing

知的財産管理  
& ライセンス業務



Community Development & Outreach  
コミュニティ育成  
& 普及活動



Back-Office Operations

事務管理業務



Infrastructure & Security

インフラ整備  
& セキュリティ対策

# Talking points - 話題

- Terms & Governance model overview - 用語の定義とガバナンスモデル概要
- Pros and Cons of different governance models - 異なるガバナンスモデルの利点と課題
- Collaboration: open source vs. proprietary - 協業: オープンソース vs. プロプライエタリ
- Why open source may not be enough - オープンソースだけでは不十分な理由
- Recent developments - 最近の開発動向

# Governance model overview - ガバナンスモデル概要

There are several different governance **types**. Some examples (non exhaustive):

ガバナンスにはいくつか異なる「タイプ」がある。以下は例 (非網羅的)

## Hierarchical Governance 階層型ガバナンス

- A central authority, such as a company or organization, controls the development and strategic direction of the software. 企業や組織などの中央権限が、ソフトウェアの開発および戦略的な方向
- Decisions are made top-down, often with clearly defined roles and responsibilities. 決定はトップダウンで行われ、その多くは明確に定められた役割と責任のもと

## Meritocratic Governance 能力主義ガバナンス

- Often found in open-source communities. オープンソースコミュニティでよく見られる
- Decisions are based on contributions and expertise of community members. Those who contribute more and with higher quality have greater influence. 決定はコミュニティメンバーの貢献度と専門知識に基づいて行われる。より多く、かつ高品質な貢献をしたメンバーほど、より大きな影響力を持つ。

## Consensus-Based Governance 合意形成型ガバナンス

- Decisions are made when all involved parties agree. 関係者全員の同意を得て決定が下され
- Often used in smaller teams to avoid conflicts. 衝突を避けるために、より小規模なチームでよく用いられる。

# Pros and cons of different governance models

## 異なるガバナンスモデルの利点と課題

Governance model ガバナンスモデル	✔ Pros 利点	✘ Cons 課題
<b>Hierarchical governance</b> 階層型ガバナンス	<ul style="list-style-type: none"><li>• Clear roles and responsibilities ensure efficient decision-making. 明確な役割と責任が、効率的な意思決定を保証</li><li>• Strong control may lead to consistency and quality. 強力な管理は、一貫性と品質の確保につながる</li></ul>	<ul style="list-style-type: none"><li>• Can be slow to adapt to change. 変化への対応に時間がかかることがある</li><li>• Risk of top-down decisions that overlook input from lower levels. 現場の声を無視したトップダウン決定のリスク</li><li>• Risk of limited innovation and flexibility. 革新性と柔軟性が限定されるリスク</li></ul>
<b>Meritocratic governance</b> 能力主義ガバナンス	<ul style="list-style-type: none"><li>• Rewards expertise and quality contributions. 専門知識と高品質な貢献を評価する</li><li>• Encourages active participation from capable individuals. 能力のある個人の積極的な参加を促す</li><li>• Faster progress. より迅速な進捗</li></ul>	<ul style="list-style-type: none"><li>• Can create power imbalances if certain contributors dominate. 特定の貢献者が支配的になると力の不均衡が生じることがある</li><li>• Higher effort for newcomers to gain influence. 新規参加者が影響力を得るには、より多くの労力が必要</li></ul>
<b>Consensus-based governance</b> 合意形成型ガバナンス	<ul style="list-style-type: none"><li>• Ensures all voices are heard, fostering cooperation and mutual agreement. 全ての意見を聞き取り、協力和相互同意を促進</li><li>• Decisions are generally well-supported by participants. 決定内容は一般に参加者からよく支持される</li></ul>	<ul style="list-style-type: none"><li>• Time-consuming, especially in larger groups. 特に大規模なグループでは、時間を要する</li><li>• Risk of deadlocks if consensus cannot be reached. 合意形成ができない場合、行き詰まりになるリスク</li></ul>

## Pros and cons of different governance models

If you want to go fast, go alone.  
If you want to go far, go together.

速く行きたいなら、一人で行け。遠くまで行きたいなら、皆で行け。

African proverb

Meritocratic governance seems to be a good trade off between speed and inclusion  
能力主義ガバナンスは、スピードと参加数の良いトレードオフの関係にあるように見える

# Collaboration: open source vs. proprietary

## 協業: オープンソース vs. プロプライエタリ

### Open Source オープンソース

- **Transparency:** Everyone can view, inspect, and suggest changes to the source code.
- **Flexibility:** Easily customizable to meet specific needs.
- **Community support:** A large community of developers collaborates on improvements and offers assistance.
- **Encourages innovation:** Open collaboration accelerates the development of new ideas and solutions.
- **Horizontally enabled standards:** potential to drive domain wide quasi standards on commodity technology.
- **Cost efficiency:** Reducing development costs by sharing efforts.

VS

### Proprietary 独自の

- **Quality control:** Development and maintenance are handled by a dedicated company, often adhering to strict quality standards.
- **Support and service:** Comprehensive customer support and technical assistance are typically provided.
- **Stability:** Consistent updates and long-term support from the company.
- **Commercial use:** Clear licensing frameworks that are important for businesses.
- **Secret sauce:** the way to go when working on IP you want to own.

When working on non differentiating IP, open source might be the better choice  
差別化のないIPに取り組む場合、オープンソースの方が良い選択肢かもしれない

# Why open source may not be enough オープンソースだけでは不十分な理由

## What defines open source? オープンソースを定義するものは何ですか ?

### Freedom 0 自由0

to **run** the program, for any purpose

いかなる目的であってもプログラムを実行する

### Freedom 1 自由1

to **study** how the program works, and **change** it to make it do what you wish

プログラムがどのように動作するかを研究し、それを変更して希望通りに動作させる

### Freedom 2 自由2

to **redistribute** copies

コピーを再配布する

### Freedom 3 自由3

to distribute copies of your **modified** versions to others

変更したバージョンのコピーを他の人に配布すること

# Why open source may not be enough オープンソースだけでは不十分な理由

## Open collaboration オープンコラボレーション

### Contribution 貢献

- Transfer of IP rights 知的財産権の譲渡
- Future influence 将来の影響

### Collaboration コラボレーション

- Rules for collaboration (Governance) コラボレーションのルール(ガバナンス)
- Predictability 予測可能性
- Sustainability 持続可能性

## Open source オープンソース

### Adoption 採択

- Open Source License オープンソースライセンス
- Four Freedoms 4つの自由

If you want to foster collaboration, you need a vendor neutral governance  
コラボレーションを促進したいなら、ベンダー中立的なガバナンスが必要です

# Recent developments Eclipse SDV の最近の開発

## Eclipse S-CORE

- Automotive runtime with series commitment量産を見据えた自動車向けランタイム環境
- Release 0.5 at 11.11.2025  
2025年11月11日に0.5をリリース



On June 24th at AEK, VDA announced ([German](#), [English](#)) a [Memorandum of Understanding](#) to enable cooperation in open source software development, to be specifically hosted under the [Eclipse S-CORE](#) project. The MoU was signed by 11 major automotive companies including BMW, Continental, ETAS, Hella, Mercedes-Benz, Qorix, Robert Bosch, Valeo, Vector, Porsche, and ZF.

	Frank Weber Member of the Board of Management	
	Dr. Mathias Pillin CTO Mobility	
	Jean-François Tarabbia Head of Architecture and Network Solutions Business Area	
	Dr. Thomas Irawan CEO	
	Guido Schütte EVP, Member of the Executive Board Electronics	
	Markus Schäfer RD Chief Technology Officer, Development & Procurement	

	Markus Schupfner CEO / Managing Director	
	Dr. Nico Hartmann CTO / Managing Director	
	Joachim Matthes CTO Valeo Brain Division	
	Dr. Matthias Traub Managing Director	
	Dr. Michael Steiner Member of the Extended Executive Committee Volkswagen AG, Group R&D	
	Axel Andorff Group Chief Technology Engineer	
	Torsten Gollewski Executive Vice-President Corporate R&D Innovation & Technology	

# 2nd iteration MoU unveiled during CES 2026

CES 2026で第2版MoUを発表

Eclipse SDV Executive Breakfast

エクリプス SDV エグゼクティブ ブレックファースト

👤 7th January 2026

👤 Location: Conrads Resort World Las Vegas, Blossom

Ballrom

Central topic: unveil the 2nd iteration of the OSS MoU

<https://luma.com/ow2rhqeg>



# Recent developments Eclipse SDV の最近の開発

## Eclipse Trustable Software Framework

The Eclipse Trustable Software Framework project focuses on the development of the Trustable Software Framework (TSF) methodology and supporting tools, and their application to open source software projects.

- Measure SW Risk ソフトウェアリスクの測定
- Functional Safety 機能安全
- Cybersecurity サイバーセキュリティ
- safety assessed up to ASIL D in November 2025

2025 年11月にASIL Dまでの安全性が評価される

## Eclipse OpenSOVD

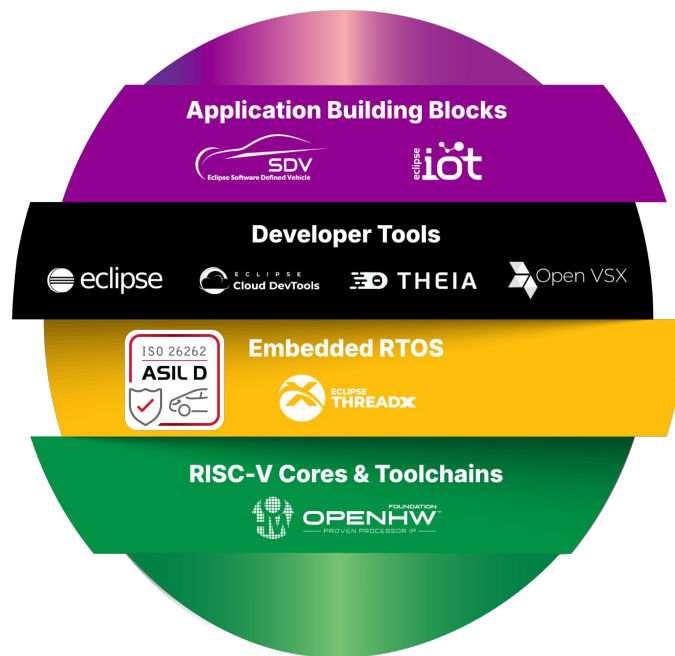
- New project initiated by Mercedes  
メルセデスが開始した新しいプロジェクト
- Aims developing an open source SOVD stack, as defined in ISO 17978 で定義されているオープンソースのSOVDスタックの開発を目指します。
- More than 100 participants in the kickoff meeting  
キックオフミーティングには100人以上が参加

# How SDV works with the greater Eclipse ecosystem

SDV が Eclipse エコシステム全体とどのように連携するか

A comprehensive open source stack for automotive and other embedded safety-critical applications

自動車やその他の組み込み安全性が重要なアプリケーション向けの包括的なオープンソーススタック



# Automotive Open Source Summit 2026

🏠 29th-30th June 2026

🏠 Location: Hotel Vier Jahreszeiten Starnberg

🏠 CFP will open beginning of 2026 CFPは2026年初頭に開始される予定

🏠 planning council out of the community 地域外の計画協議会

**Register here:** <https://www.automotive-oss.org/event/2026/summary>

Questions?

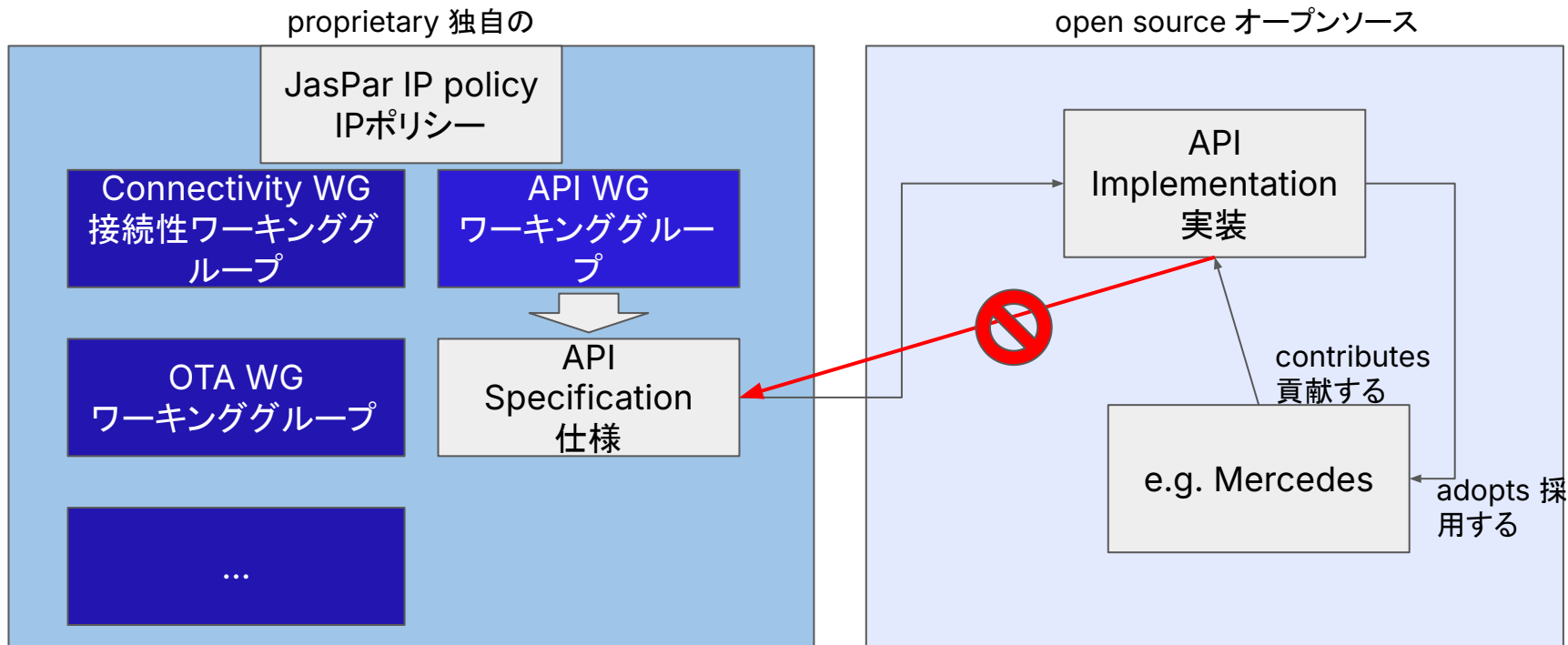


# Backup



# Challenges with connecting collaborations of different types

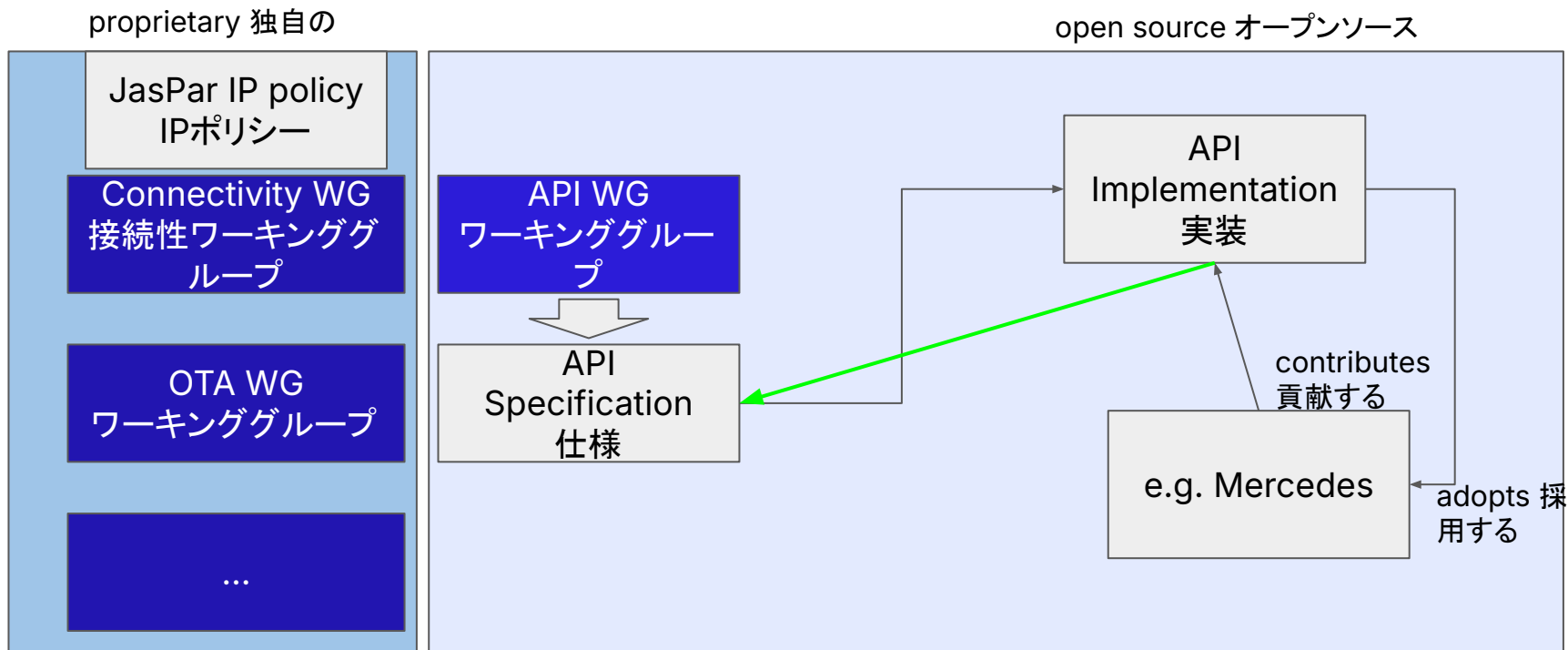
(on the example of JasPar API specifications)



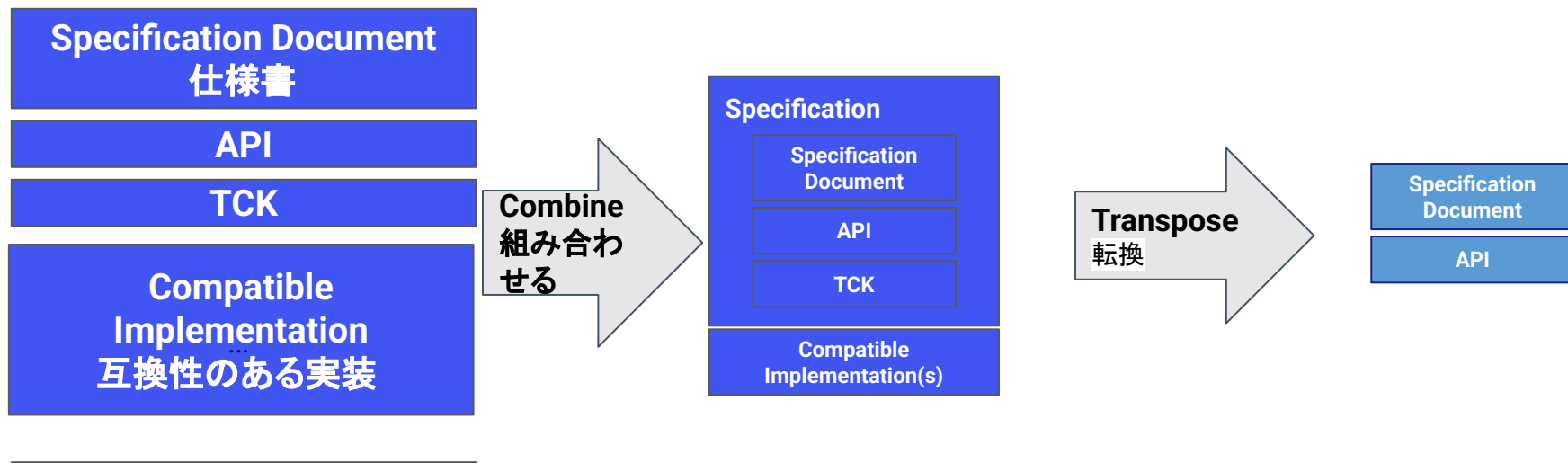
## patent right licenses in context of OSS における特許権ライセンス

type	meaning	Compatibility with OSS
FRAND	means fair, reasonable, and non-discriminatory licenses. This means that before you can implement the specification you are required to obtain a license from the patent holders who developed the specification.	is generally considered to be antithetical to open source development, as it requires permission and money to implement a specification or potentially even to use an implementation of such a specification.
FRAND-Z	is FRAND where the cost of the license is set to zero	Note that although this removes the cost concerns of FRAND, permission may still be required for use and/or implementation.
RF or royalty-free	provides <i>a priori</i> royalty-free licenses from the participants developing the specifications to downstream users and implementers	This is considered a best practice for enabling open source implementations of a specification. <u>All Eclipse Foundation specifications are developed on a royalty-free basis.</u>
Non-assert	is another legal mechanism which provides a result effectively similar to royalty-free. A non-assert says that a patent holder will not assert their patent rights against an implementer or user.	Needs legal basis for regulation. (i.e. companies need to become members in an association or similar)

# Potential Solution 潜在的な解決策



# Specification Process at Eclipse and beyond における仕様策定プロセスとその先





# ISO JTC1 PAS Submitter Status 提出者のステータス

renewed for five years in  
June 2024

2024年6月に5年間更新

Unanimous approval, with 26  
national bodies participating in the  
vote

26の国家機関が投票に参加し、全会一  
致で承認された

## Examples of adopters of the Eclipse Specification process



Specifications for the AsciiDoc language and the APIs processing it.



The ORC WG aims to develop specifications for regulatory compliance that can be transformed into international standards.



A forum to build and promote the specifications needed to create scalable, modular, extensible, industry-ready, interoperable, trusted and sovereign open source components based on open standards for dataspace.



The industry-leading specification for developing enterprise and cloud native java applications



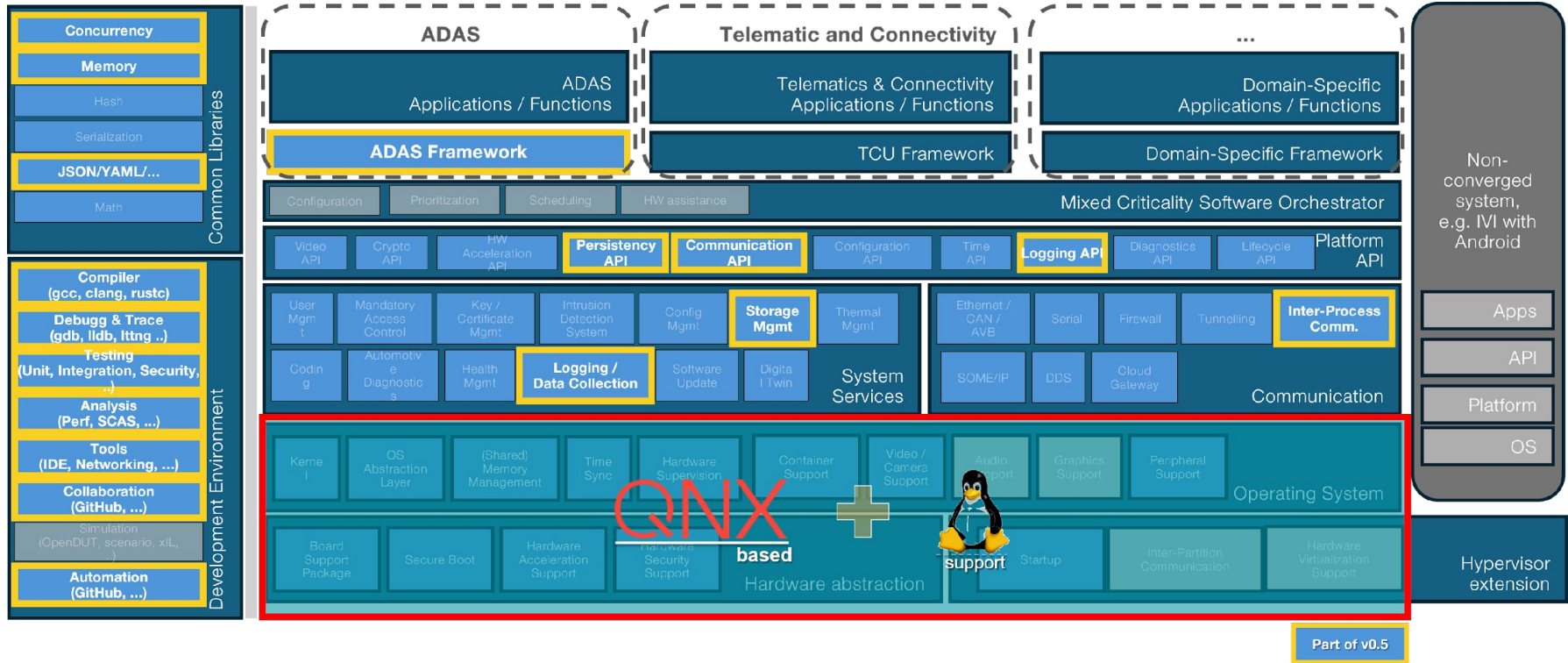
Specifications that enable development, deployment, and management of embedded, server-side, and cloud native applications.



Provides MQTT clients the framework to seamlessly integrate industrial machine data from their applications, sensors, devices, and gateways within the MQTT Infrastructure.

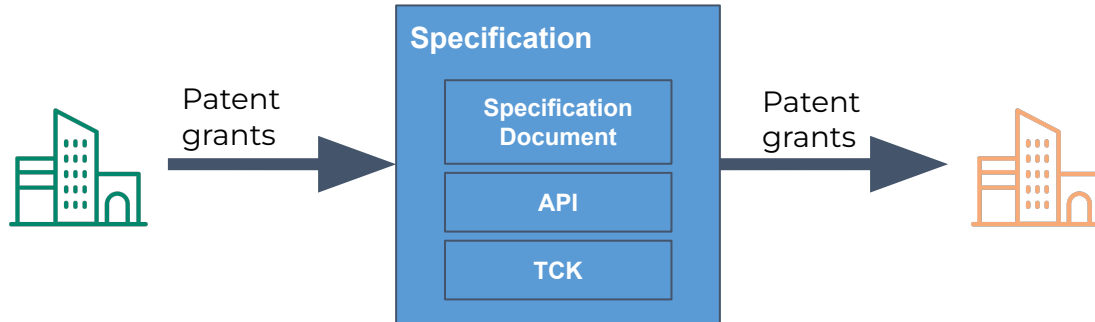


# DEEPLIVE | COMPONENTS OF SCORE 0.5.



# Essential Claims

- Fundamentally, the EFSP is about managing intellectual property grants



# Why Eclipse SDV in open source?



## Developers/resources

- All major players target and struggle to recruit needed developers
- "War" for talents



## Proprietary solutions

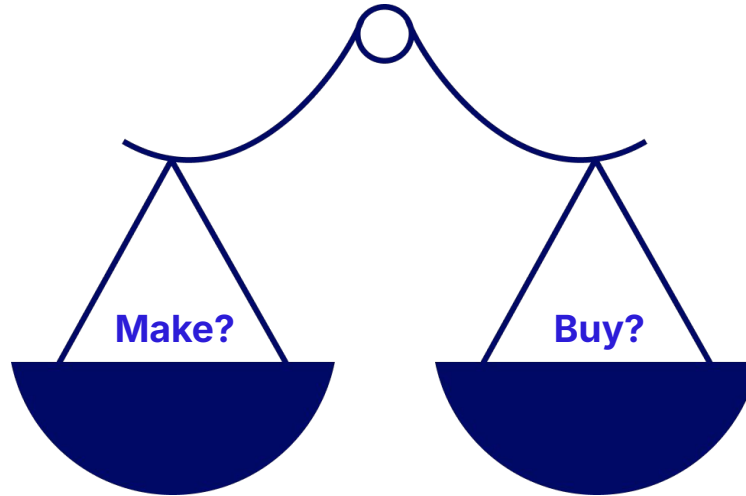
- Little exchange beyond company limits
- Business ecosystem requires (open) standards
- Reinventing the "wheel"
- Limited innovation power



## Cost & time-to-market

- Huge cost and increasing
- Projects delayed

# Why Eclipse SDV in open source?

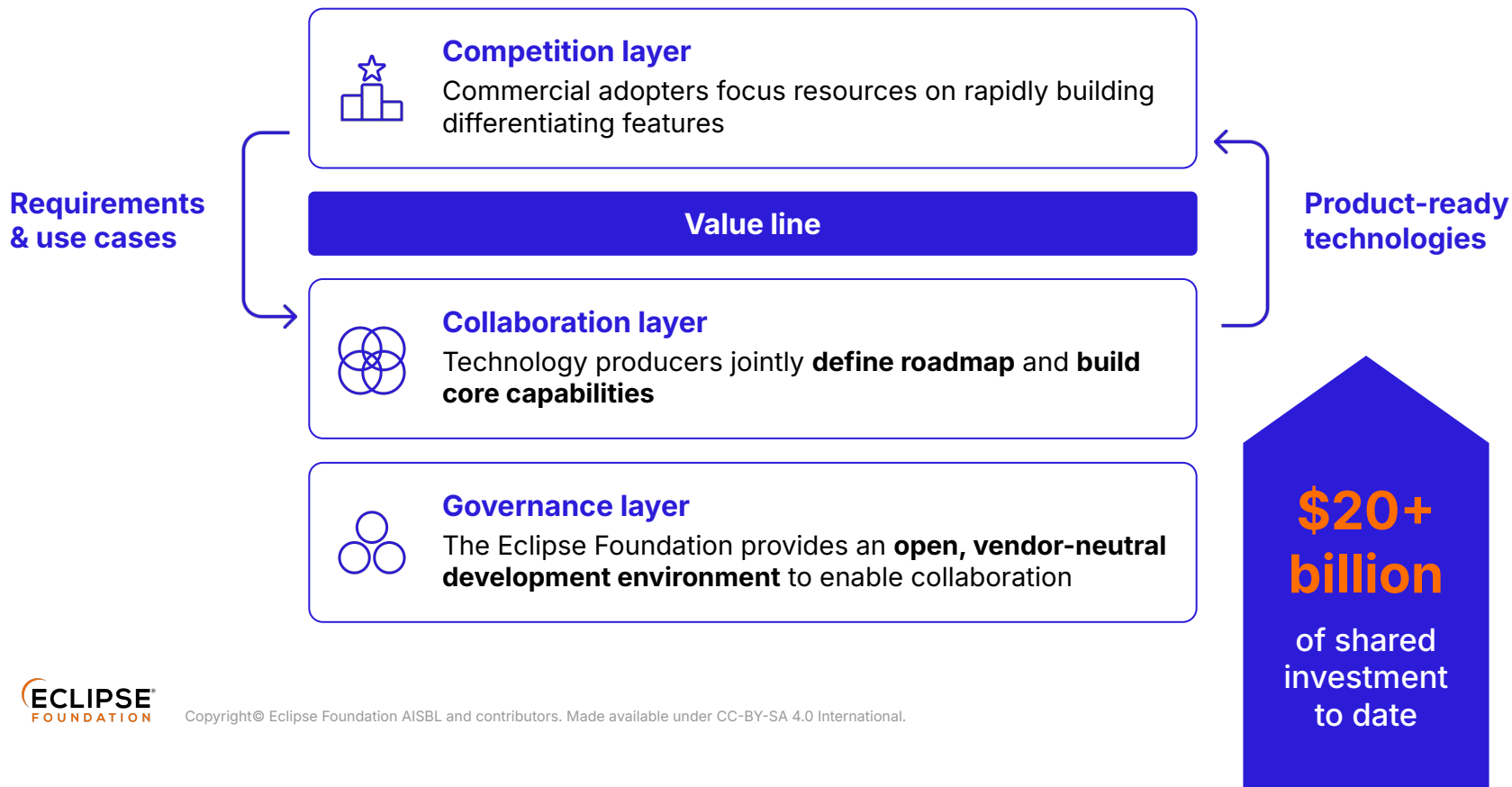


# Why Eclipse SDV in open source?

There is a 3rd option:

**Integrate and collaborate**

# Why Eclipse Foundation?



# We foster innovation through open source collaboration

Driven by a diverse community of communities, we enable open source collaboration and drive sustainable innovation on a global scale.

**400+**

Projects

**12K+**

Contributors

**300+**

Members

**20+**

Industry  
collaborations

**465M+**

Lines of code

**50+**

Countries represented  
by committers

**\$25B+**

Shared technology  
investment

**20+**

Years of  
innovation