



# Current status on the interplay of AI, vehicle safety and responsible AI regulation

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- Definitions
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# Context

- There's an increase in the deployment of AI including in the automotive sector
- Regulation of AI is also increasing:
  - global trend with the EU the first;
  - focus on GenAI – linked to higher risk applications in terms of manipulation, discrimination, etc.; its use is increasing esp. for productivity tools; GenAI emerging as a "building block" for other AI systems
- **UNECE work on AI and automotive:**
  - 2022/3: Work with OICA lead on a paper on AI definitions for the purpose of considering AI in automotive
  - 2024: Plan to hold a **workshop** with CPs and NGOs within GRVA to align on the purpose of Global Documents regarding AI and next steps



# Artificial Intelligence | | Machine Learning

**Artificial intelligence** is a **set of methods or automated entities** that together build, optimize and apply a model so that the system can, for a given set of predefined tasks, compute predictions, recommendations, or decisions.

**Machine learning** is a collection of **data-based computational techniques** to create an ability to learn without following explicit instructions such that the model's behavior reflects patterns in data or experience.



**Responsible & ethical  
AI Regulations**

**RXX UN ECE  
Safety Regulation  
for Vehicles**



**Industry  
Standards & Best  
Practices for  
Software Testing**



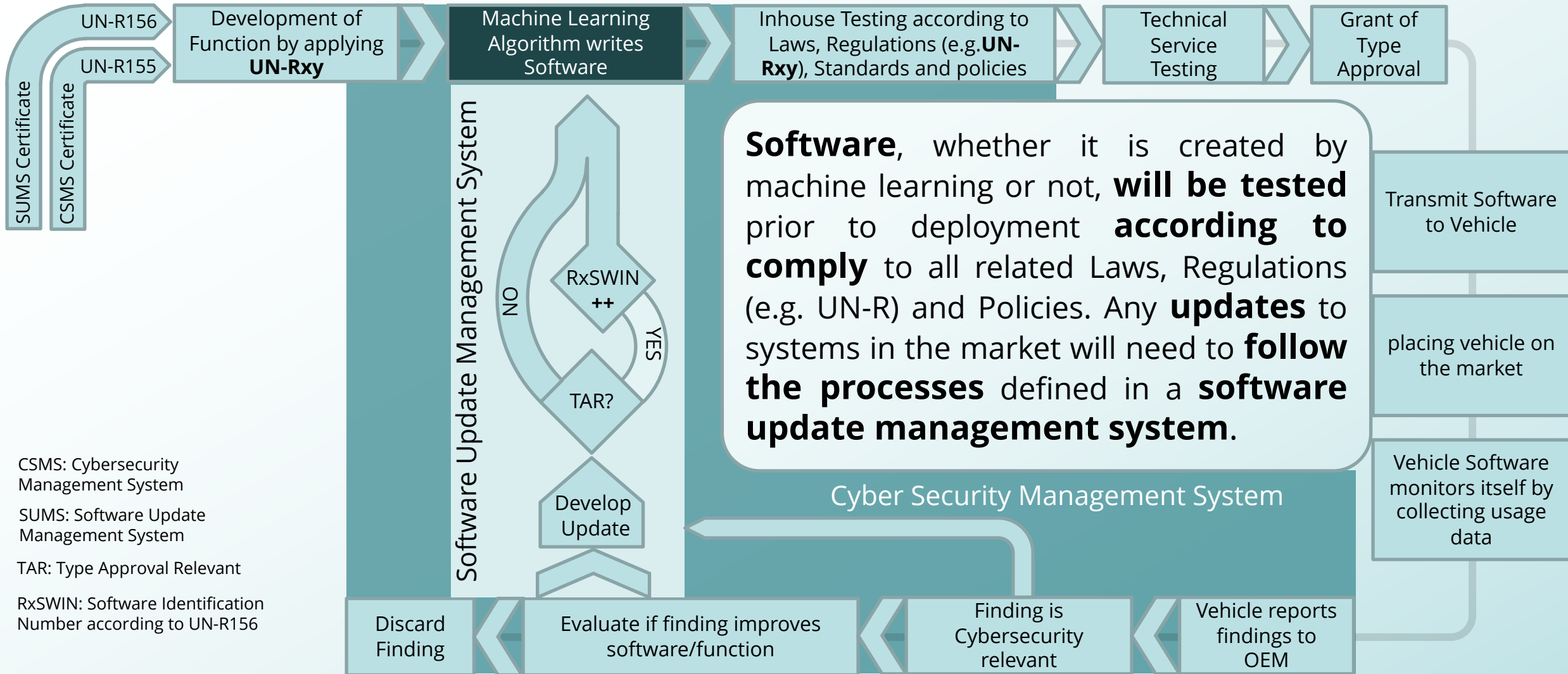
# Artificial Intelligence and technical regulations

- **Type approval relevant functions** and relevant systems' testing already address (some of the) risks for harm (incl. unauthorised access, manipulation, etc):
  - Driver assistant systems
  - Automated Driving Functions
  - CSMS and SUMS
  - Steering, Brakes, Engine and Exhaust gas aftertreatments
- ...and those that are non-Type Approval relevant:
  - Infotainment
  - Speech recognition
  - Comfort functions (heated seats,...)



# Type Approval

## Coverage of Technical regulations



CSMS: Cybersecurity Management System

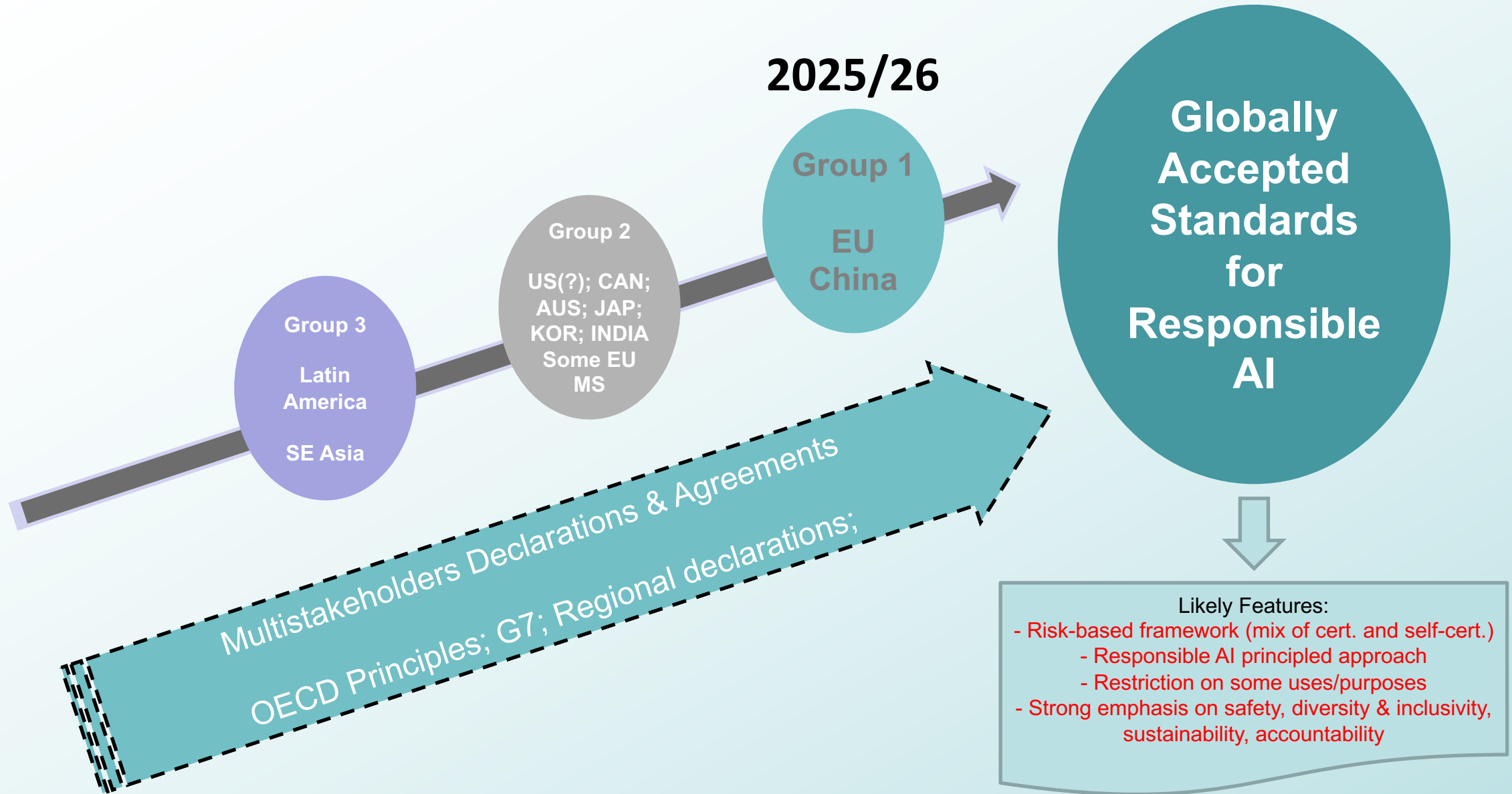
SUMS: Software Update Management System

TAR: Type Approval Relevant

RxSWIN: Software Identification Number according to UN-R156



# AI regulation global development







**THANK YOU**