Readiness for Automotive Suppliers



# **UNECE – Cyber Security Management System**Readiness for Automotive Suppliers

#### Rising challenges...

As connectivity and digitization become an integral part of the modern vehicle, Cyber Security – in addition to product safety – must be ensured over the entire product life cycle as a means of consumer protection. This is accompanied by a comprehensive structural change also in the supplier industry.

In January 2021 the United Nations Economic Commission for Europe (UNECE) WP.29 working groups released a binding regulation on Cyber Security (UN-R155) for OEMs and third parties to address these arising threats and to harmonize vehicle regulations by law.

The new UN regulation requires them to establish and operate a mature Cyber Security Management System (CSMS) and demonstrate their supplier's capability to consider Cyber Security as well as the security of their own product. Therefore an standardized integration of new Cyber Security requirements throughout the entire supply chain is inevitable.



Certification **Target CSMS** Certified maturity level **CSMS** readv (②) ISO/SAE 21434 Product Security Requirements ⑫ T3...Tn **OFM** Parts/HW/SW... **Components Systems** approval (Op) ISO/SAE 21434 Supplier CSMS Capability

Fig. 1 - Integration of UN-R155 requirements based on ISO 21434 in the supply chain

#### ...need to be met

Cross-companies' governance and organizational structures as well as key processes over the whole product lifecycle need to be re-engineered respectively established and streamlined to ensure UNECE WP.29 R155 (WP.29/R155) compliance and fulfill the pre-condition for type approval of new vehicles

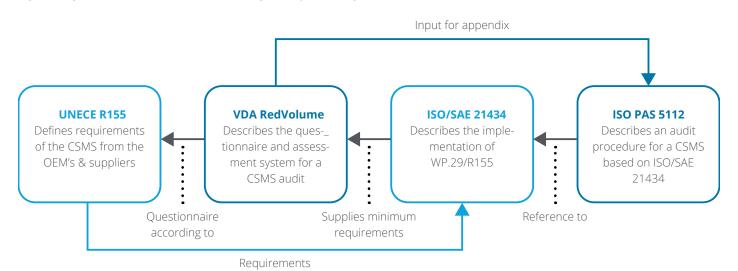
The according implementation framework is documented in the key standard

ISO/SAE 21434 sharpened by further standards, supporting guidelines and documents.

Vehicle manufacturer (OEM) must fulfill the UN-R155 requirements by an certified CSMS. Vehicle manufacturers shall ensure these requirements are also met by suppliers.

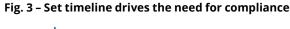
R-155 aims for a secured Supply Chain and shared responsibility.

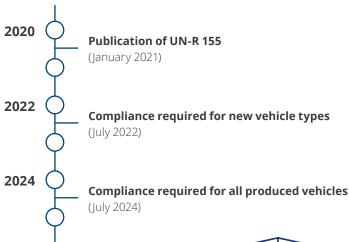
Fig. 2 - Dependencies within the current regulatory landscape



# The UN-R155 regulation will impact the whole automotive ecosystem and its stakeholders.

The vehicle manufacturer shall be required to demonstrate how their Cyber Security Management System will manage dependencies that may exist with contracted suppliers, service providers or manufacturer's sub-organizations in regards of the requirements of paragraph 7.2.2.2. of the regulation R-155.







93%

of all automotive manufacturers suffered a direct Cyber Security breach due to weaknesses in their supply chain according to Forbes.



66% of attacks focus of

of attacks focus on the supplier's code according to ENISA (2021).

ISO/SAE 21434 is a baseline for OEMs and suppliers to ensure that cybersecurity risks are managed efficiently and effectively.

#### Your benefits

Being prepared for cyber risks offer a variety of competitive advantages to your (digital) business:

- Fostering of customer trust in your secure products
- Enhancing your USP with security aspects and strengthen your market positioning
- First choice: Preferred partnerships within the supply network

#### Our proven approach on your journey

"Deloitte's Automotive Supplier Cyber Security Framework" delivers enabling and supporting CSMS capabilities end-to-end ensuring coverage of the entire product life cycle and providing industry-leading practices and insights.

#### Fig. 4 - Our approach

**Phase** 

1

**Phase** 

2

**Phase** 

3

#### **Assessment & Evaluation**

Understanding the current state and maturity of your CSMS

#### Success factors\*

Standardized & holistic assessment approach based on ISO21434, VDA RedVolume and leading practices for **OEM and** third parties

## Planning & Strategy mitment to the CSMS str

Commitment to the CSMS strategy and high level target operating model

Establish an effective **governance structure** and **Cyber Security program management** to drive communication, activities and change

#### **Design & Implementation**

Structured CSMS roll-out approach aligned with the organization

Streamline, re-engineer and implement key Cyber Security processes and controls over the entire product life cycle and increase transparency throughout the supply chain

# Phase

# Accomplish CSMS Readiness & Maintenance

Effective CSMS is managed in a sustainable and scalable way

Controls are implemented and effectiveness of the CSMS is continuously **verified** through **spot-checks** and **deep dives** 

Operating of CSMS e.g. VSOC

\* Extract



#### Your starting point with us

"Deloitte's Automotive Supplier Cyber Security Framework" provides a structured approach for assessment & evaluation covering following key services in the first phase:



#### **Health Checks**

Get an high-level snapshot of your current maturity level of your CSMS and identify first quick-wins with our blueprints for necessary processes, roles and responsibilities and tool support.



#### **Assessment**

Our proven and robust approach bases on ISO 21434, VDA RedVolume and leading practices, e.g., PAS 5112 and helps you to be prepared for future OEM requests.



#### Report

Results are compiled in a comprehensive management summary incl. recommendations enabling you to make clear strategic decisions on your journey for Cyber Security readiness.

#### Why Deloitte?

- Deloitte automotive clients represent some of the world's largest OEMs, suppliers, dealers, captive finance companies and aftermarket manufacturers
- Broad experience and insights derived from implemented UNECE readiness programs and best practices as well as certified CSMS incl. type approvals
- Standardized & integrated assessment approach embedded in "Deloitte's Automotive Supplier Cyber Security Framework" considering current effective regulations and standards
- Global network of experienced auditors and automotive Cyber Security experts
- Standardization Groups: Deloitte is member of the German DIN AK11 (ISO/SAE 21434, Cyber-security) and DIN AK12 (ISO/AWI 24089, SUMS)



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