

# Automotive Compliance & Security Management with Finite State



## The Evolving Compliance Landscape for Connected Vehicles

The automotive industry faces an increasingly complex regulatory environment, especially regarding software security and supply chain transparency. Key regulations and standards include:

### 1. Commerce Department Connected Vehicle Rule (Proposed):

- Requires detailed SBOMs for vehicle software
- Mandates supply chain visibility and vendor analysis
- Prohibits certain imports from foreign adversary countries
- Compliance deadlines: MY2027 (software), MY2030 (hardware)

### 2. UNECE Regulation No. 155:

- Establishes cybersecurity management system requirements
- Mandates security-by-design principles for vehicle type approval
- Requires ongoing risk assessment and incident response

### 3. ISO/SAE 21434:

- Defines cybersecurity engineering for road vehicles
- Emphasizes secure software development throughout the vehicle lifecycle
- Requires management of third-party components and vulnerabilities

### 4. ISO 24089:

- Focuses on software update engineering for road vehicles
- Requires transparency in software components and changes

Findings					
C	H	M	L		
0	21	73	1,218		
3	12	46	36		
0	1	8	3		
0	1	7	3		
0	1	13	2		
0	0	2	3		
1	0	1	1		
0	0	2	1		

These regulations collectively emphasize the critical need for comprehensive SBOM management and robust supply chain security measures in the automotive industry.

## Finite State: Your Partner in Automotive Compliance and Security

Finite State offers a comprehensive platform to help automotive manufacturers and suppliers meet complex regulatory requirements, manage supply chain risk, and secure connected vehicles.



Generate, manage, and validate SBOMs to meet global regulatory requirements



Detect and mitigate risks in your connected vehicle software supply chain



Ensure multi-standard compliance with automated reporting and continuous monitoring



Simplify supplier management and view compiled SBOMs in one place

## Secure Your Connected Vehicle Software Supply Chain

Identify and mitigate risks across your entire connected vehicle software ecosystem:

- > **Vulnerability Correlation:** Detect known and unknown vulnerabilities in first and third-party code
- > **Risk Scoring:** Prioritize actions based on exploit availability and severity
- > **Continuous Monitoring:** Track software changes and new vulnerabilities in real-time
- > **Global Search:** Quickly identify critical issues across your vehicle software portfolio
- > **Remediation Workflows:** Receive tailored recommendations to address vulnerabilities

## Key Benefits for Automotive Manufacturers and Suppliers:



**Simplify Compliance:** Easily meet SBOM requirements for new automotive regulations



**Streamline Supplier Management:** Efficiently collect and validate supplier SBOMs



**Improve Efficiency:** Automate SBOM processes to save time and resources



**Enhance Security:** Gain deep visibility into your software supply chain



**Reduce Risk:** Quickly identify and address vulnerabilities across your vehicle software

## Comprehensive SBOM Management for Automotive Compliance

Finite State's Software Bill of Materials (SBOM) capabilities form the foundation of our automotive compliance and security solution, addressing the complex needs of vehicle manufacturers and suppliers.

### Key SBOM Features:

#### 1. Multi-Source Generation

- Create SBOMs from source code, binaries, firmware, and IaC
- Support for diverse automotive architectures (ARM, MIPS, x86)
- Automatic firmware unpacking and analysis

#### 2. Enrichment and Analysis

- Vulnerability correlation with 200+ sources
- License analysis and compliance checking
- End-of-Life (EOL) component detection
- Custom policy enforcement

#### 3. Seamless Integration and Management

- Ingest and unify SBOMs from multiple suppliers

## Expert Services for Regulatory Compliance

Complement our platform with specialized services:

- **Penetration Testing:** Validate overall system security with our Red Team
- **Policy Consulting:** Navigate complex regulatory requirements with guidance from former senior U.S. government officials

#### 4. Compliance-Ready Reporting

- Generate SBOMs in SPDX, CycloneDX, and custom formats
- Secure distribution to regulators, customers, and suppliers

#### 5. Continuous Monitoring and Security

- Real-time vulnerability alerts
- Automated rescanning



Partner with Finite State to safeguard your connected vehicles, navigate complex regulatory demands, and protect your brand in the rapidly evolving automotive landscape.



Contact Us Today  
[finitestate.io](https://finitestate.io)