CARALERT

Automated Vulnerability Management

Today's vehicles are essentially computers on wheels, exposed to numerous cyberattack vectors at both individual and fleet levels. UN-R155 regulations mandate OEMs and Tier 1/2 suppliers to implement vulnerability management.

Key Challenges Include:

Complex Supply Chains
Numerous suppliers with multiple tools and parts, lacking standardized distribution mechanisms.

—

Connectivity Risks
Interfaces like Bluetooth, WiFi, cellular, CAN and ETH make vehicles susceptible to remote attacks.

—

Manual Processes
Time-consuming methods need rerunning at each development stage and often miss many vulnerabilities.

—

Increased Threat Landscape
More attackers target vehicles and fleets, ranging from individuals to nation-states.

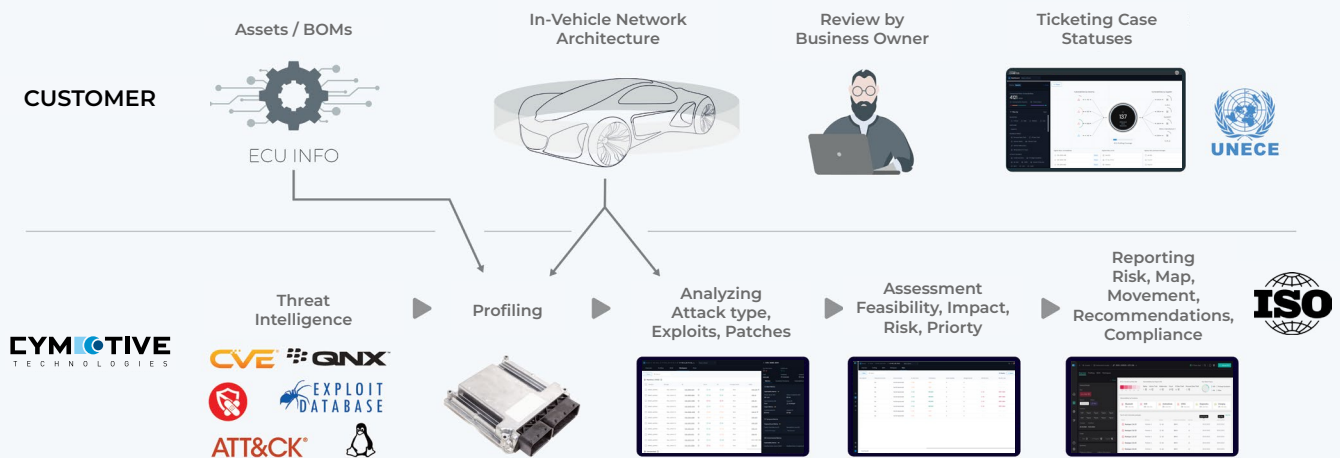### Comprehensive Vulnerability Management

CarAlert uses extensive data sources, advanced algorithms, and automated processes to ensure thorough and cost-effective vulnerability management throughout the vehicle lifecycle.

**CarAlert
The Gold Standard**

Benefit from expert teams and processes for automated vulnerability monitoring and management.

CarAlert automatically matches, prioritizes and resolves vulnerabilities throughout the vehicle lifecycle to protect your brand, save time and money, and enhance road safety.

CarAlert Process Flow

CUSTOMER

Assets / BOMs
ECU INFO

In-Vehicle Network Architecture

Review by Business Owner

Ticketing Case Statuses

UNECE

CYMOTIVE TECHNOLOGIES

CVE · QNX · EXPLOIT DATABASE · ATT&CK

Threat Intelligence ▶ Profiling ▶ Analyzing Attack type, Exploits, Patches ▶ Assessment Feasibility, Impact, Risk, Priorty ▶ Reporting Risk, Map, Movement, Recommendations, Compliance

ISO

About CYMOTIVE Technologies

CYMOTIVE Technologies was co-founded in 2016 by the VW Group and top-tier Israeli security experts. It now provides preemptive cybersecurity solutions to major car manufacturers and top-tier suppliers.

PATENT PROTECTED

Highlighted Features of CarAlert

Comprehensive Analysis
Maps software and hardware vulnerabilities to the ECUs.

—

Risk Assessment and Scoring
Prioritizes vulnerabilities according to their potential impact.

—

Mitigation Recommendations
Offers clear guidance on resolving vulnerabilities.

—

Detailed Reporting
Provides actionable insights into critical vulnerabilities.

Deep Experience, Wide Expertise

Comprehensive Databases
Includes all major vulnerability databases.

—

Proprietary Zero-Day Discoveries
Applies unique insights into emerging threats.

—

Penetration-Testing Data
Enhances automated analysis.

—

Continuous Threat Intelligence (TI)
Tailored for smart mobility to monitor and process a wide range of feeds.

Benefits for OEMs and Tier 1/2 Suppliers

Full Lifecycle Coverage
From development through post-production.

—

Brand Protection
Mitigates risks that could damage brand reputation.

—

Regulatory Compliance
Adheres to UN-R155 requirements.

—

Ongoing Visibility
Indicates vulnerabilities' risk scores for respective software components.

—

Automated Processes
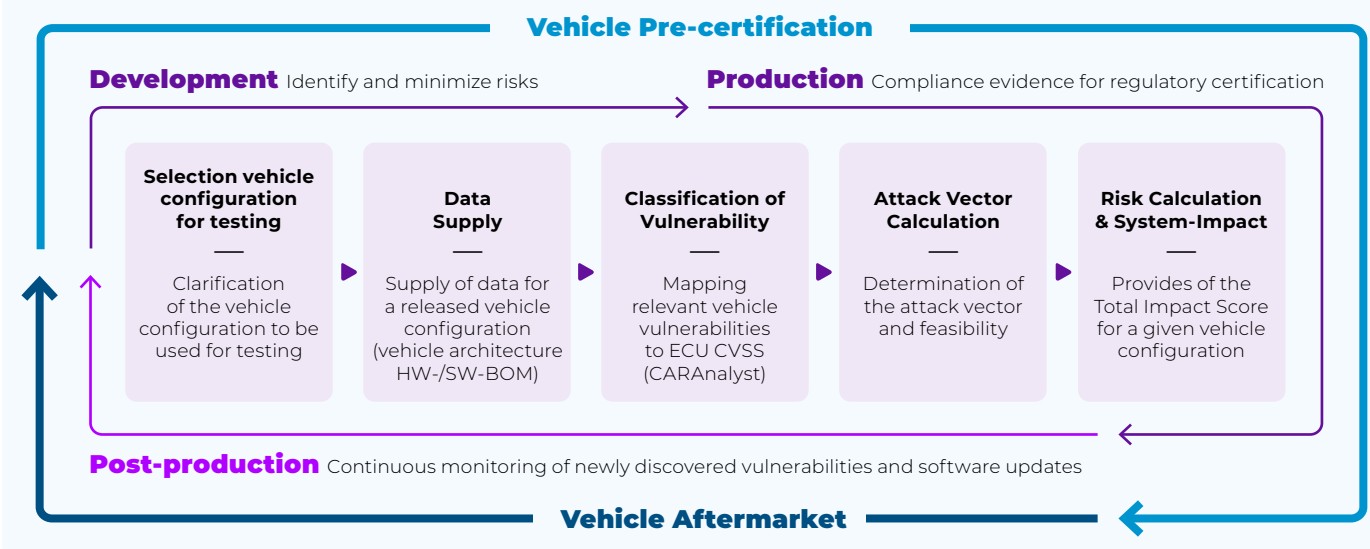Save time, reduce costs, and improve accuracy.

BOM Enhancement

Review of Supplier Information
Ensures accuracy and relevance.

—

Automated Documentation
Streamlines compliance processes.

CarAlert Process Flow

Vehicle Pre-certification

Development Identify and minimize risks

Production Compliance evidence for regulatory certification

Selection vehicle configuration for testing	Data Supply	Classification of Vulnerability	Attack Vector Calculation	Risk Calculation & System-Impact
—	—	—	—	—
Clarification of the vehicle configuration to be used for testing	Supply of data for a released vehicle configuration (vehicle architecture HW-/SW-BOM)	Mapping relevant vehicle vulnerabilities to ECU CVSS (CARAnalyst)	Determination of the attack vector and feasibility	Provides of the Total Impact Score for a given vehicle configuration

Post-production Continuous monitoring of newly discovered vulnerabilities and software updates

Vehicle Aftermarket

Continuously monitor newly announced/discovered vulnerabilities as well as reanalyzing software updates and monitoring ECU lifespan as well as clear mitigation recommendations.

CYMOTIVE
TECHNOLOGIES

For more information, visit our website or contact us at **sales@cymotive.com**