Quality assurance solutions for connected vehicles

Overview
As the Internet of Things (IoT) transforms society the automotive industry is leading the way with the adoption of wireless technologies.

Consumers have high expectations for connected vehicles to seamlessly integrate with the rest of their life and demand faultless performance.

Through the Ericsson Device and Application Verification (EDAV) portfolio for connected vehicles Ericsson is committed to providing automotive manufacturers services to optimize performance, enhance customer experience, reduce post launch operational expenses, and ensure compliance to network and regulatory requirements globally.

The EDAV connected vehicle capabilities are supported by a global network of best-in-class testing facilities that enable automotive manufacturers to launch solutions with confidence.

Benefits
The benefits of the EDAV Connected Vehicle platform for automotive companies include:

- Ensure interoperability globally across diverse networks.
- Perform reliable testing on actual mobile network infrastructure rather than inferior simulation testing.
- Optimized test plans based on field experience.
- Access to the latest network features and services, often before commercial launch.
- Efficiently manage diverse certification and compliance needs to launch in any country around the world.
- Reduce time to market and after sales support costs through optimized quality assurance.
Verification Services
The EDAV connected vehicle platform supports the following services:

**TCU testing:**
Assures the interoperability and optimal performance of the Telematics Control Unit (TCU) with the actual mobile network infrastructure found in different operator networks around the world to support commercial launch with the ability to replicate issues seen in the field to identify root causes and develop fixes.

**Wi-Fi hotspot testing:**
Establishes the best location for the hotspot, optimizes Wi-Fi performance and minimizes RF interference to deliver superior customer experience.

**Application verification:**
Tests address quality issues within infotainment systems covering application functional testing, application responsiveness together with GUI look and feel testing. Quantifies application performance through key metrics such as latency, uplink, downlink, signaling etc.

**Live network testing:**
Test interoperability of connected vehicles and embedded electronics with different mobile networks around the world at speed on a test track using configurable Ericsson mobile infrastructure.

**Security:**
Connected vehicle connectivity and application security testing covering remote wakeup, insecure firmware, local data storage, insecure web interfaces, insecure network services, insecure communication and insecure authentication. Test TCU per CTIA Cybersecurity Test plan in EDAV CTIA Authorized Test Lab (CATL).

**Global certification:**
Global connectivity and certification services are provided to support the global launch of connected vehicles. The service involves working to get the connected vehicle device components such as the TCU certified for commercial launch globally in any country and managing the certification renewals.

**Connected traffic:**
In this test package Ericsson will test connected vehicles with connected traffic solutions from Ericsson and/or third parties covering Vehicle to Infrastructure (V2I) and network based Vehicle to Vehicle (V2V).

For more information: [https://www.ericsson.com/digital-services](https://www.ericsson.com/digital-services)

About Ericsson
We are a world leader in the rapidly changing environment of communications technology — providing equipment, software and services to enable transformation through mobility. Some 48 percent of global mobile traffic runs through networks we have supplied. More than 1 billion subscribers around the world rely every day on networks that we manage. With more than 37,000 granted patents, we have one of the industry’s strongest intellectual property rights portfolios. Our leadership in technology and services has been a driving force behind the expansion and improvement of connectivity worldwide. We believe that through mobility, our society can be transformed for the better. New innovations and forms of expression are finding a greater audience, industries and hierarchies are being revolutionized, and we are seeing a fundamental change in the way we communicate, socialize and make decisions together. These exciting changes represent the realization of our vision: a Networked Society, where every person and every industry is empowered to reach their full potential.