

Achieving ASPICE Level 2 Compliance for Infotainment Systems for a Global OEM

In a high-stakes environment where compliance with international standards is crucial, Acsia successfully led a project to help a leading Tier-I supplier meet ASPICE Level 2 compliance. This initiative was critical for launching an advanced infotainment system slated for inclusion in future models of the leading luxury OEM.

Technology & Business Landscape

In 2022, the European automotive industry witnessed significant technological advancements, particularly in the realm of automotive software development. As vehicles became increasingly software-driven, the importance of adhering to rigorous standards such as Automotive SPICE (ASPICE) and cybersecurity measures like UN R155 became paramount. These standards are critical for ensuring the safety, reliability, and security of automotive systems, which are increasingly interconnected and exposed to cyber threats.

ASPICE Compliance

Automotive Software Process Improvement and Capability Determination (ASPICE) is a framework used widely by automotive manufacturers and suppliers to assess and enhance their software development processes. ASPICE Level 2 compliance indicates a mature process management capability that systematically manages, controls, and monitors software development. This level of compliance is often required by European OEMs and is

crucial for suppliers aiming to demonstrate their capability in delivering high-quality software consistently.

Cybersecurity Regulations

The integration of UN R155, a regulation developed by the United Nations Economic Commission for Europe (UNECE), into automotive standards, highlights the growing focus on cybersecurity. This regulation mandates that all vehicles be equipped with a comprehensive cybersecurity management system to protect against, monitor, and respond to cyber-attacks effectively. Compliance with UN R155 is not just about enhancing security but also about building consumer trust in new automotive technologies.

Infotainment Systems

The infotainment systems market has seen substantial growth, driven by consumer demand for vehicles equipped with advanced connectivity, multimedia capabilities, and intuitive user interfaces.

Major automotive players like Continental, Bosch, Volkswagen, Daimler, and BMW have been at the forefront of integrating cutting-edge infotainment technologies. These systems are central to the digital cockpit of modern vehicles, combining entertainment, navigation, and connectivity functions with vehicle diagnostics and user settings into a single system interface.

Market Dynamics

The push towards more connected and autonomous vehicles has led to an increased emphasis on software capabilities within the automotive sector. This shift necessitates a deeper integration of software development standards and cybersecurity measures as fundamental components of the vehicle design and manufacturing process.

Suppliers and OEMs must continuously evolve their processes to meet these stringent standards, which are becoming as critical as the mechanical components of a vehicle.

Customer Problem Statement

To address the stringent requirements of ASPICE 3.1 Level 2 and prepare for imminent OEM audits, the customer needed to ensure their infotainment systems met the necessary standards, particularly with the production rollout deadline approaching. The challenge was further intensified by the need to comply with UN R155 Cybersecurity and Cybersecurity Management System regulations. Recognizing the complexity and urgency of these requirements, the customer sought expert assistance to ensure timely and successful compliance.

Acsia Solution

Acsia deployed a robust approach involving 100+ engineers who were ramped up in just seven months. The team tackled over 100+ features across more than 10 domains and addressed over 50+ change requests.

Acsia's intervention included:

- Detailed process mapping and gap analysis.
- Integration of best practices in compliance and documentation.
- Strategic planning to align with ASPICE Level 2 processes while ensuring the system met ISO 26262 ASIL-D standards for functional safety.



Business Outcome & Impact

Compliance Achievement

Successfully enabled the Tier-I supplier to achieve ASPICE Level 2 compliance.

Audit Success

Facilitated a successful audit process, clearing the way for meeting the OEM's production rollout deadline.

Safety & Security Standards

Ensured the infotainment system met the highest standards of functional safety and security, crucial for the OEM's competitive edge in the market.

Key Learning

Acsia's experience highlights the importance of agility and expertise in navigating complex compliance landscapes. The project underscored the need for:

- Effective team scalability within short timelines.
- Strong technical leadership to manage extensive feature integration and regulatory compliance.



Expert Speak



Gloria Joseph
Delivery Leader

“Meeting the ASPICE Level 2 compliance within the set timeline was a formidable challenge, but our team’s dedication and adaptability were key to our success. The coordination of 105 skilled engineers and the integration of over 70 new features while managing 80 change requests demonstrated our capability to handle complex projects under pressure. This achievement not only reflects our technical proficiency but also our commitment to delivering excellence in every aspect of our work.”



Vishnudas C. H.
SME

“ASPICE Level 2 is not just a benchmark; it’s a comprehensive standard that ensures rigorous quality and process control in software development. Achieving 100% compliance was crucial for our client’s strategic objectives and required a deep dive into every layer of the development process. Our success in this project underscores our expertise in automotive software engineering and sets a new standard for future projects. It’s a testament to our team’s ability to translate complex standards into effective, practical solutions that enhance product quality and safety.”

About Acsia Technologies

Acsia is a global leader in automotive software powering Digital Cockpits & Displays, e-Mobility, and Telematics. We use our expertise to develop solutions that simplify complex problems and create safer, sustainable, and more compelling driver and passenger experiences. With a presence across the United States, Germany, Sweden, Japan, and India, we collaborate with top carmakers and Tier-I suppliers.



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