

UNECE R155/R156 CONSULTANCY & CERTIFICATION FOR VEHICLE MANUFACTURERS



► Who is this for?

Vehicle manufacturers (OEMs)

► What are the deliverables?

R155/R156 workshops, Gap analysis report and a Compliance Report shared with the Approval Authority

► What is the objective?

Consultancy and certification for UNECE R155/R156 regulations, preparing for the audit and compiling the required test results



INSIGHT INTO YOUR DIGITAL SECURITY

Secura has worked in information security and privacy for over two decades. This is why we uniquely understand the challenges that you face like no one else and would be delighted to help you address your information security matters efficiently and thoroughly. We work in the areas of people, processes and technology. For our customers we offer a range of security assessment services varying in depth and scope.

What is UNECE?

UNECE, the United Nations Economic Commission for Europe, **published two draft regulations concerning vehicle cybersecurity and software updates requirements**. Vehicle manufacturers in the future need to comply with these requirements. The regulations prepared by the Task Force Cyber Security and (Over The Air) Software Updates (TFCS/OTA) are the:

- **Cyber Security Regulation (R155)**, covering
 - Cyber Security Management System (CSMS)
 - Vehicle Type specific Cyber Security Approval
- **Software Updates Regulation (R156)**, covering:
 - Software Update Management System (SUMS)
 - Vehicle Type specific Software Update approval



These regulations have **entered into force from 2021**.

From this moment, vehicle manufacturers which are in the scope of these regulations will need to fulfill their requirements in order to place their vehicles on the countries covered by UNECE. Recognized Technical Services will be in charge of assessing the way in which automotive OEMs are addressing the requirements of the regulations in their internal processes and vehicles. Approval Authorities will receive the reports created by the Technical Services, and issue the type approval. **As a recognized Technical Service**, Secura is able to support you with official UNECE audits, as well as **preparation for compliance**.

Scope of Regulations

The new regulations from UNECE cover cybersecurity and software updates topics. The scope of the regulations includes a wide range of vehicles, including industrial vehicles (ex. trucks), personal vehicles, transportation vehicles (ex. buses), all the way to trailers.

The regulations are addressing the processes used by the manufacturers of these vehicles during the whole vehicle life cycle, therefore including development, production and post production. Compliance with the Cybersecurity Management System (CSMS) and Software Updates Management System (SUMS) needs to be demonstrated as the first steps in the two regulations.

Building on that, for each new vehicle type (in terms of cybersecurity and software updates), the OEMs need to demonstrate that the processes from the CSMS and SUMS were fully and correctly applied in the design of the vehicle.

Services for Vehicle Manufacturers

INITIAL WORKSHOPS

A correct understanding of the regulation's requirements, and the impact which they might have on the management systems or the vehicle is crucial, especially since in the automotive domain changes depend heavily on the supply chain. Secura has been actively involved in the development of the regulation, and can provide **remote or on-site workshops focused on the contents and intentions of the requirements**, as well as the necessary documentation needed for the Technical Services.

GAP ANALYSIS AUDITS

A pre-audit, combined with a gap analysis, is a recommended exercise to perform before the regulations will come official in effect. After such a pre-audit, the manufacturer can determine which of the regulation requirements are not yet fulfilled, and start planning actions accordingly. Secura can support with **conducting such pre-audits**, focused on the whole regulation, or on a particular set of requirements, depending on the needs of the manufacturer.

SUPPORT IN TESTING

An important part of the cybersecurity regulation is the demonstration of the security features integrated into the vehicle. The manufacturer can perform such testing internally, however in practice this can be time consuming, or challenging in terms of ensuring the completeness of the tests. At the same time, an incomplete test report could mean later delays in the official audit. Secura can support you with **fully tailorable testing services in line with the UNECE requirements**. As a recognized Technical Service, Secura knows exactly what, and up to what degree, needs to be tested, ensuring an efficient approach. Testing could cover a component, system, several systems, and of course the whole vehicle.

OFFICIAL CERTIFICATION

As a recognized Technical Service, Secura can support with official R155 and R156 audits, for both the management systems, as well as vehicle types in the scope of R155 and R156 regulations.



Insight Into Your Security with Secura

Secura has worked in information security and privacy for over 15 years. By leveraging our experience and expertise, we are a strong partner to address your information security matters efficiently and thoroughly. We can offer you the following consultancy and support services, in line with the UNECE automotive regulations:

- ▶ Workshops on understanding the requirements of the new regulations, as well as the intention behind these requirements
- ▶ Preliminary assessment and gap analysis focused on the Cybersecurity regulation requirements
- ▶ Preliminary assessment and gap analysis focused on the Software Updates regulation requirements
- ▶ Security testing on systems and the whole vehicle, in line with the threats and security mitigations proposed by UNECE
- ▶ Official certification for R155 and R156

Would you like to know more about the UNECE automotive regulations?

Contact us today to discuss our services in more detail and find out which service fits your product best.

