



GOUVERNEMENT

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SOFTWARE UPDATES AND IDENTIFICATION

Implementation of Revision 8 to Consolidated Resolution No. 3 (R.E.3)

Background

Software updates

R156 provides requirements to ensure the safe management and deployment of **software updates on vehicles that are already placed on the market**.

Manufacturers must have processes in place to check if a software update affects **type approved characteristics**

If any approval to a UN Regulation is affected, the manufacturer must **apply for an extension or a new approval** before deploying the software update

All relevant UN Regulations must therefore **accommodate software updates**

Software identification

R156 gives a uniform standard for software identification called **RXSWIN** (Regulation No. **X** SoftWare Identification **N**umber)

RXSWIN allows the **quick identification of the exact approvals** to all relevant UN Regulations where that software is involved

In parallel, identifying the **exact software equipped on vehicles tested** during approval is critical for traceability, as is already the case for the identification of hardware

The amendments to R.E.3 (WP.29/2025/147)

Template for amending UN Regulations to:

- Define RXSWIN
- Allow manufacturers to apply for a new approval for purposes of software updates*
- Not consider production as “definitely discontinued” if the manufacturer intends to obtain extensions for software updates
- Include RXSWIN and related information on the communication form

AND

- Require the exact software version of tested vehicles to be included in test reports

Which Regulations to amend?

Regulations where software is **always**
involved

Example: AEBS

Regulations where software is **sometimes**
involved

Example: underrun protection

Regulations where software is **never**
involved

Example: external projections

Must be amended

**Should not be
amended**

Criteria to be eligible:

- UN Regulation applicable to **vehicles** of at least one category among M, N, O, R, S or T (Cat. L, components and STUs are not in scope of R156)
- At least one requirement **can be affected** by vehicle software

Provisional list of relevant UN Regulations

GR	UN Regulations
GRBP (see GRBP-79-42)	51, 64, 138, 141, 142, 165
GRE (see GRE-90-27)	10, 45, 48, 86
GRPE (see GRPE-91-07)	24, 49, 68, 83, 85, 96, 101, 120, 154, 168
GRSG (see GRSG-130-42)	18, 36, 39, 46, 52, 55, 58, 67, 73, 93, 97, 102, 105, 107, 110, 116, 121, 122, 125, 144, 147, 151, 158, 159, 160, 161, 162, 163, 166, 169, 176
GRSP (see GRSP-75-29)	11, 12, 16, 17, 21, 32, 33, 94, 95, 100, 127, 134, 135, 137, 153
GRVA (see GRVA-18-34r1)	13, 13-H, 79, 89, 130, 131, 139, 140, 152, 155, 156, 157, 171, 175, 178

Call for action

- **GRs should amend their relevant Regulations as soon as possible to include the software-related provisions of Revision 8 to R.E.3**
- **Amending the Regulations can be done *via* supplements: no new requirements**
- **These amendments will allow OEMs to better implement R156, and will allow CPs to better trace and identify software on vehicles on the market after over-the-air updates are performed**