

PROPOSAL FOR AMENDMENTS TO REGULATION No. 100 (Electric Power Train)

Note: The text reproduced below was prepared by the expert from the Netherlands in order to add L category vehicles to the scope.

The modifications to the existing text of Regulation No. 100 are marked in bold or strikethrough characters.

I. Proposal

Paragraph 1., amend to read:

"1. SCOPE

The following prescriptions apply to safety requirements with respect to the electric power train of road vehicles of categories M and N, with a maximum design speed exceeding 25 km/h, **and road vehicles of category L**, equipped with one or more traction motor(s) operated by electric power and not permanently connected to the grid, as well as their high voltage components and systems which are galvanically connected to the high voltage bus of the electric power train.

This regulation does not cover post crash safety requirements of road vehicles."

Add a new *paragraph 2.28*:

"2.28. **"Vehicle equipped with bodywork" means a vehicle for which the passenger compartment is bounded or may be bounded by at least four of the following elements: windscreen, floor, roof, side and rear walls or doors.**"

Paragraph 5.1.1., amend to read:

"5.1.1. Protection against direct contact

The protection against direct contact with live parts shall comply with paragraphs 5.1.1.1. and 5.1.1.2 **and additionally, for vehicles of category L only, paragraphs 5.1.1.3. and 5.1.1.4.** These protections (solid insulator, barrier, enclosure, etc.) shall not be able to be opened, disassembled or removed without the use of tools."

"5.1.1.1. For protection of live parts inside the passenger compartment or luggage compartment, the protection degree IPXXD shall be provided."

"5.1.1.2. For protection of live parts in areas other than the passenger compartment or luggage compartment, the protection degree IPXXB shall be satisfied"

Add a new *paragraph 5.1.1.3.*:

"5.1.1.3. **For vehicles equipped with bodywork, but the passenger or luggage compartment is not fully bounded by the roof, floor, side walls, access doors, glazing, front bulkhead as well as the rear bulkhead, the protection degree IPXXB shall be applicable both inside and outside of such compartment. Any opening roof, glazing and access door shall be in the closed position for assessment of the compartment boundaries.**"

Add a new *paragraph 5.1.1.4.*:

"5.1.1.4. **For vehicles not equipped with bodywork, the protection degree IPXXB shall be applicable in all cases and in all areas.**"

Former *paragraph 5.1.1.3, 5.1.1.4. and 5.1.1.5.* renumber *paragraph 5.1.1.5, 5.1.1.6. and 5.1.1.7.*

Paragraph 5.3., amend to read:

"5.3. FUNCTIONAL SAFETY

At least a momentary indication shall be given to the driver when the vehicle is in "active driving possible mode".

However, this provision does not apply under conditions where an internal combustion engine provides directly or indirectly the vehicle's propulsion power.

When leaving **or alighting** the vehicle, the driver shall be informed by a signal (e.g. optical or audible signal) if the vehicle is still in the active driving possible mode. **This requirement does not apply to two-wheel vehicles where the active driving possible mode automatically switches off when the stand is extended or swung into the open position.**

If the on-board RESS can be externally charged by the user, vehicle movement by its own propulsion system shall be impossible as long as the connector of the external electric power supply is physically connected to the vehicle inlet.

This requirement shall be demonstrated by using the connector specified by the car manufacturer.

The state of the drive direction control unit shall be identified to the driver. **This does not apply to two-wheel vehicles not equipped with a device for reversing."**

II. Justification

Under national law, Member States require UNECE Regulation No. 100 for national individual approval of vehicles of category L. However, UNECE Regulation No. 100 only include vehicles of categories M and N in its scope.

This proposal add vehicles of category L to the scope of UNECE Regulation No. 100 and adjust the text where this is necessary and unique for vehicles of category L.

This text is aligned with the present proposals within the European Union concerning the 'L-cat codecision Reg. Regulation on vehicle functional safety requirements (RVFSR)'.
