

Informal document **GRSP-68-22**
68th GRSP, 07-11 December 2020
Agenda item 22(j)



Updates to UN Regulation No. 136

Background

- UN Regulation No. 136 describes the safety requirements with respect to the electric power train and REESS of vehicles of category L.
- UN Regulation No. 136 was developed by GRSP IWG RESS, based on the 02 series of Amendments to UN Regulation No. 100.
- The new 03 series of Amendments to UN Regulation No. 100, transcribing the provisions of UN GTR No. 20, was adopted by WP.29 in November 2020.
- IMMA is preparing a new series of Amendments to UN Regulation No. 136, mainly to introduce the new technical provisions in R100.03 into R136, expecting submission to GRSP in the course of 2021.

Updates to UN Regulation No. 136

Harmonization with the corresponding new content in R100.03

- Updated and new definitions
- Revised requirements for protection against electrical shock
- Addition of protection against water effects on the EV
- New warning in the event of low energy content in REESS
- Additional tests for the REESS
 - Overcurrent protection for DC-charging
 - Low-temperature protection
 - Management of gases emitted (*)
 - Warning in the event of failure of vehicle controls for safe operation
 - Warning in the case of thermal event
 - Thermal propagation (*)
 - Inclusion of “venting” as pass-fail criterion (*)
- Updated numbering and content of Annexes

(*) Applicable to vehicles with a passenger compartment only

Updates to UN Regulation No. 136

Introduction of dedicated requirements for swappable REESS

- Swappable REESS may be mounted in different vehicle models, having different mounting positions
- To ensure safe operation of a swappable REESS in different orientations and avoid multiple testing for each vehicle design, it is proposed to introduce dedicated stricter testing conditions, such as:
 - Vibration test
 - Mechanical shock
- Inclusion of a clause in the Communication Form, to state that a specific REESS has been subject to stricter requirements and can be used for swapping purposes.



IMMA

INTERNATIONAL MOTORCYCLE
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Thank you for your attention