IWG ADR-EV

Subgroup Motor Vehicle manufacturers

Status 2023-01-30

- Malin Bard, new pilot since December 2022.

Meetings since IWG-EV_10th session

- 2022-10-31: Meeting with User group in Brussels – Bowtie review.
- 2022-11-24: Decide who to pilot which group to succeed Karine Pelletier.
- 2022-12-15: Battery Master switch. Decide on ”common working document”.
- 2023-01-10: Battery Master switch continued.
- 2023-01-12: TPRD venting of HFCV (presentation from Iveco).
- 2023-01-20: Battery Master Switch almost concluded.
- 2023-01-26: Working doc structure. Thermal runaway.

~ Meetings every second week

Strategies

- Technical neutrality.
- Refer to standards and regulations to define the technical demands (e.g. UN R100-03 OK for FL?).
- Preparing the proposal of modifications of chapter 9.2 to complete with missing configurations (e.g. FL EV) .
- In line with the ADR agreement, recommend modifications and guidance documents to the IWG-EV on time for the ADR 2025 edition.

Topics in discussion

- For any scenarios with thermal runaway risks.
- Protection of the battery from mechanical impact.
- Battery master switch versus high voltage system.
- Is charging in the scope, and which charging?
- Hydrogen
- Leakage of corrosive substances.
- Upgrades of Diesel to an EV in the scope?
  - IWG_EV feedback needed

Example: Proposal on Battery Master Switch

9.2.2.8 ~~*Battery master switch*~~ *De-energizing electrical circuits]*

9.2.2.8.1 ~~A switch for breaking the electrical circuits shall be placed as close to the battery as practicable.~~ **Features to enable the de-energization of all electrical circuits shall be placed as close to the energy source(s) as practicable**. If a single pole switch is used it shall be placed in the supply lead and not in the earth lead.

9.2.2.8.2 A control device to facilitate the disconnecting and reconnecting functions of the switch shall be installed in the driver's cab. It shall be readily accessible to the driver and be distinctively marked. It shall be protected against inadvertent operation by either adding a protective cover, by using a dual movement control device or by other suitable means. Additional control devices may be installed provided they are distinctively marked and protected against inadvertent operation. If the control device(s) are electrically operated, the circuits of the control device(s) are subject to the requirements of 9.2.2.9.

9.2.2.8.3 The switch shall break the circuits within ~~10~~ [30] seconds after activation of the control device.

Thank you! Questions?