

**Summary Report by Chair of IWG for GTR 20 (Electrical Vehicle Safety) to the 70th Meeting
of Group of Experts on Passive Safety**

December 10, 2021

The IWG on GTR 20 has been meeting regularly, with the last meeting of the IWG taking place on October 19-22. We realized that despite the progress made in Phase 2 in updating the GTR, more time will be needed to fully address some of the aspects of this GTR, including the constantly evolving technology as well as challenges faced in form of real life field data coming in. I informed WP.29 that we had requested in GRSP in May 2021, and informally asked for in the 184th Session of WP.29, for an 18-months extension, which was accepted. WP.29/AC.3 also formally approved the mandate extension but we are committed to continue working hard to finish the technical work and present it to GRSP on time.

In the meetings, which are well represented by CPs, industry and other stakeholders from Asia, Europe, and North America, we get regular progress CP's reports on their progress in adopting the GTR, or on their national regulations, and from the industry colleges updates on the international standards development. It is encouraging to see a solid core of participants, experts who are committed to this difficult task.

We are still evaluating the thermal propagation of a battery cell and evaluating the best method for artificially triggering the thermal propagation in battery cells and battery packs to fully understand the risks associated with batteries, the timing of the propagation in order to protect the occupants, the flammability and toxicity of gases emanating from the battery pack, the temperature levels to prevent spreading of fire to the surrounding vehicles and structures, etc. We are considering tests for overcurrent and further studying overcharge and undercharge of batteries. We are also evaluating the appropriateness to regulate some aspects of EVS in the GTR, such as a variety of REESS vibration and water immersion scenarios and concerns...whether these are issues related to product reliability or vehicle safety...in order to address them with the correct countermeasures, and with the support of relevant, field-data.

Our next meeting will take place virtually on January 19-20, 2022, and will focus only on thermal propagation and triggering or initiation methods.