

## **Summary Report by Chair of IWG for GTR 20 (Electrical Vehicle Safety) to the 71st Meeting of Group of Experts on Passive Safety, May 10, 2022**

Since we met in December 2021, the IWG has met twice, still only virtually, with the last meeting taking place on March 22-25. As you recall, after we requested an 18-months extension, WP.29/AC.3 formally approved the mandate extension. Our meetings continue to be well represented by cosponsors and several other CPs, industry and other stakeholders from Asia, Europe, and North America. We hear of positive developments on the adoption of the current GTR 20 provisions into the national regulations.

We are still in the processing of learning and evaluating the triggering methods and also of alternative approaches to the issue. The US experts are encouraging the IWG to consider the documentation method, which could become an alternative to testing. At the same time, we are learning of the industry making strides in advancing prognosticating technologies which would allow for early detection and through pro-active BMS neutralization of the threatening thermal propagation runaway.

While testing and evaluating the thermal propagation, we are seeing signs that the gases emanating from the affected battery cell or pack, could potentially be toxic, lethal and/or flammable. The EU's Joint Research Centre experts are focusing on this issue and studying it very carefully. We anticipate that the analyses should be completed by the end of this year, which makes me wonder if we should consider one more extension of the mandate. We continue to evaluate the effects of overcurrent, overcharge and undercharge on the battery. We have had extensive discussions on the appropriateness to regulate some aspects of EVS in the GTR, such as quite extreme tests of REESS vibration and full vehicle water immersion, and whether upgrades to the requirements that are already in the GTR are needed. Given the lack of sufficient field data, which would demonstrate the need for such changes, IWG has decided to postpone the discussions for the moment unless new evidence is produced.

Our next meeting will take place virtually in June 8-10, 2022, and unless the global situation changes even more drastically, we plan to hold our first in-person meeting in October. I am grateful to have a fantastic support in our co-sponsors: the European Commission on behalf of the European Union, the People's Republic of China, Japan and the United States, and other active CPs, namely Canada, India, Korea and the UK, the many industry experts and colleagues, and my personal appreciation goes also to our Secretary Koshika-san of Japan. Many thanks for your attention.