

Chair's status report on the Progress of the Hydrogen GTR 13 IWG, as presented to GRSP on May 17:

The 9th Meeting of the Informal Working Group on Hydrogen and Fuel Cell Vehicles Global Technical Regulation No. 13, Phase 2, took place virtually during the course of three days on March 23, 25 and 26.

The meeting followed the Agenda prepared in advance with the feedback from Co-sponsors (US, Japan, Korea, China and the EU) and Contracting parties and stakeholders.

Because of the limited time due to the virtual format of the meetings, we focused the agenda on the most critical, outstanding issues some of which have puzzled and frustrated the IWG already since Phase 1. Most of you know that Phase 1 ended with the adoption of the GTR 13 for Hydrogen vehicles in June 2013. There were several issues that the IWG decided at the time to tackle later on in order to deliver the GTR.

In Phase 2 5 main task forces were initially created to work on these issues:

TF 1 Extension of the scope to apply to HD vehicles and the relevant issues – storage of hydrogen, containers and extension of service life from 15 to 25 years, permeation criteria, TPRD release direction, etc.

TF 2 Receptacle focusing on the performance of the receptacle in high-pressure fueling conditions, and geometry of the receptacle to prevent freezing up, etc.

TF 3 Test procedures where we are now discussing the need and appropriateness of having for example the change of design concept and table in the GTR. Test requirements for a new breed of hydrogen tanks, the conformable containers, that manufacturers are now considering because they offer many advantages compared to the rigid, classic cylindrical shape.

TF 4 Fire test where we focus primarily on devising, validating and finetuning a safe, repeatable, reproducible, and rational test to ensure consistence in testing.

TF 5 Consideration of and synchronization with the work of ISO

In addition, the IWG also identified issues that were addressed through ad-hoc groups such as material compatibility, reduction of initial burst pressure ratio for carbon fiber tanks, which is supported by the real life or field data we have gathered since the GTR was established in 2013.

We have started finalizing and writing the language of the amendments of Phase 2 in Drafting TF.

We plan to hold the next meeting of co-sponsors in two weeks and next, 10th meeting of IWG by the end of June or beginning of July.

