

14th Meeting of the Informal Working Group on Hydrogen and Fuel Cell Vehicles

Global Technical Regulation No. 13 (Phase 2)

25-26 April 2022 – Online

	Agenda Item	Presenters	Documents
1	Opening remarks / Change of Secretary	M. Koubek	--
	<ul style="list-style-type: none"> a. The following CPs are represented: CA, CN, EC, JP, KR, UK, US. b. The Chair welcomed the participants. c. The Chair noted the upcoming retirement of current IWG Secretary Mr. Yoshio Fujimoto in the later this year and thanked him for his efforts in organizing the IWG so far. He suggested to nominate Mr. Masaaki Iwasaki (OICA/Toyota) as the successor for the Secretary, taking over beginning with the next IWG. d. All representatives supported the nomination of Mr. Iwasaki as new secretary and thanked Mr. Fujimoto for his excellent work. 		
2	Approval of agenda	M. Koubek	GTR13-14-01
	<ul style="list-style-type: none"> • The agenda was approved as presented. 		
3	Approval of the meeting minutes of the 13th meeting	Secretary	GTR13-13-07
	<ul style="list-style-type: none"> • Meeting minutes from the 13th IWG were approved. 		
4	Minutes of Cosponsors+TF leaders meeting (29-30 March)	Secretary	GTR13-13-08
	<ul style="list-style-type: none"> a. GTR13-13-08 was introduced and record was approved. b. For sled test requirement, the EC indicated that there was misunderstanding on this topic at the meeting (see 6d below). 		
5	Project schedule update	Secretary	GTR13-14-02
	<ul style="list-style-type: none"> a. When the informal document is introduced at GRSP, comments from GRSP experts will be requested by 17 June and discussed at the June IWG. Phase 3 items will also be reviewed at this meeting. b. The formal document will be submitted by 12 September to the UN secretariat. c. The Chair noted the possibility of submitting the informal document for November WP.29 so that the preparatory work can be done, and the document can be submitted to March 2023 WP.29 for a vote. 		
6	Review of issues in GTR13 Phase 2 draft		GTR13-14-03 GTR13-14-04
	<ul style="list-style-type: none"> a. TF0 leader introduced the status of the current draft submitted as GTR13-14-03. b. OICA commented that this draft reflects the conclusions made at the cosponsors meeting in March. c. The IWG went through the draft v18 and updated as v19. <ul style="list-style-type: none"> i. Para.106a: The statement is related to the fire testing of a single CHSS if a vehicle has two or more CHSS systems with the same design. The IWG agreed that since this type of wording is considered as the basic principle of type approval and applies to other requirements than fire test, so it was removed. ii. 6.2.6.1.3. (Temperature cycling of TPRD): Although a suggestion was made to change "liquid bath" to "environment", it was agreed to keep as is to be harmonized with industry standards. iii. 6.2.6.1.4 & 6.2.6.2.4. (Salt corrosion resistance test): The title of Figures 12 and 13 are modified. Transition time after "Dry stage" to the start of next cycle is not defined and under development in the industry standards. TF3 (Graham Meadows) was invited to provide a comment in the rationale. (para.147.) iv. 6.2.4.1.(b) (Gas pressure cycling test): NHTSA was concerned that the reference to SAE J2601 ramp rates might be too broad. TF3 (Livio Gambone, Tanja Smutny) commented that the reference to SAE J2601 is clarification from current situation which is too simplified and not appropriate for large CHSS. The IWG decided to keep the reference to SAE J2601 and add the published year. d. Sled test <ul style="list-style-type: none"> i. The European Commission commented that the representative at the cosponsors meeting misunderstood the sled test discussion. To clarify, the EC does not support to removing the sled test provisions. The EC 		

	<p>was unclear why text in Part 1 referring to sled test was removed and believed it should be restored, as it is in both UN and EU regulations. The EC recalled that there was a consensus among CPs with reservation only from the US.</p> <ul style="list-style-type: none"> ii. The main reason for the US's reservation was the lack of safety benefit from the sled test as it is seen as challenging only the tank mounting. Furthermore, the US did not see field evidence from on-road CNG vehicles and did not think the proposed acceleration values were appropriate. iii. Japan also supported the EC position to have sled test as a CP option. iv. CA indicated similar position as the US. Without a specific safety risk outside of a crash test, CA does not see a need for sled test in the GTR. However, CA is open to a CP option. v. CN was neutral on this point but could see it being included in Phase 3. vi. UK supports the EC to include sled test as CP option. vii. In any case, the need for post-crash requirements for heavy duty vehicles should be included as a Phase 3 item, with an expectation to review more data. viii. Consensus among CP to include text in Part I about sled test (as in draft v.11) and include as an item for Phase 3. ix. EC and TF1 will draft text based on above discussion this week. [Update: Draft text included in latest version] <p>e. Review of Phase 3 items so far:</p> <ul style="list-style-type: none"> i. List of tentative discussion items for Phase 3 discussion (para. 190 in draft v.18) was submitted in square brackets. ii. KR to provide language for side impact test. 		
7	Next IWG meetings	Secretary	--
	<ul style="list-style-type: none"> a. The Chair asked about the possibility for holding an in-person meeting in June: <ul style="list-style-type: none"> i. CA: Hybrid meeting is not preferable due to the time zone issue. ii. US: Virtual only meeting. iii. CN: May not be able to travel outside the country. b. Conclusion: June meeting will be held virtually on Webex, hosted by TMNA. c. Date: 28-29-30 June if needed depending on the response from GRSP experts. One of these days may be a co-sponsors meeting. Time: 0600 PDT, 0900 EDT, 1500 CEST, 2100 CST, 2200 JST/KST d. The Chair will address the GRSP participants in the May meeting regarding comments on the informal document. 		
8	Closing	Secretary	--
	The Chair appreciated the efforts and contributions made by IWG members for completing the document.		
9	APPENDIX: Attendees List		
	A. Murra Consulting Arkema Inc. Bosch GmbH Canada/Transport Canada China/CATARC EU/European Commission France/CEA France/UTAC Germany/BAM Go Ahead Engineering GWS Solutions of Tolland Hexagon Lincoln	Japan/JARI Japan/JASIC Japan/KHK Japan/METI Japan/MLIT Kiwa Netherlands Korea/KATRI Linamar Luxfer Gas Cylinders Maximator GmbH Nikola Motor North Trains Limited	OICA/BMW OICA/Cellcentric OICA/Daimler AG OICA/Ford OICA/Mercedes-Benz AG OICA/General Motors OICA/Hino OICA/ Honda R&D OICA/Hyundai Motor OICA/MAN EU OICA/Renault OICA/Toyota
			OICA/Van Hool NV Plastic Omnium Powertech Labs Quantum Fuel Systems RISE Sweden UK/Dept for Transport Ulster University USA/Dept of Energy USA/NHTSA Westport Power Inc.