GRSP TF on the transposition of GTR 13 Phase 2 to UN-R 134 (8)

Meeting Date: 12/01/2023 09:30 – 11:30 (CET)

Location: Microsoft Teams Meeting

Participants:

✓ Anais Garo (Utac, France)
 ✓ Andres Fernandez Duran (Iveco/OICA)
 ✓ Annett Schuessling (Lifte H2)
 ✓ Anton Weiler (IAV)
 ✓ Baptiste Ravinel (Daimler Trucks/OICA)
 ✓ Emi Miyake (Tokushima University)

✓ Alessia Bolla (Iveco/OICA)

- ✓ Emi Miyake (Tokushima University)
 ✓ Frank Otremba (NPROXX)
 ✓ Gerhard Gissibl (BMW/OICA)
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 ☑ Harald Beck (MAN/OICA)
 ☑ Hiroaki Tamura (Jari, Japan)
 ☑ Ikuya Yamashita (Honda/OICA)
- ✓ Johan Broeders (DAF/OICA)
 ✓ Karine Pelletier (Volvo/OICA)
 ✓ Klaus Keck (Daimler Truck/OICA)
- ☑ Manoj Desai (India)
- ☑ Masaaki Iwasaki (Toyota/OICA)
- ☑ Matthias Kuntz (Bosch)
- ☑ Ohgami Nobuyuki (Toyota/OICA)
- ☑ Patrick Breuer (Hexagon Purus)
- ☑ Richard Trott (Forvia/CLEPA)
- ☑ Salim Abdennadher (Renault/OICA)
- ☑ Sekiya (KHK, Japan)
- ☑ Seonghoon Kim (Hyundai/OICA)
- ☑ Shinohara (KHK, Japan)
- ☑ Shinya Yamamura (MLIT, Japan)
- ✓ Shougo Suda (Toyota/OICA)
- ☑ Takashi lijima (AIST/Japan)
- ☑ Tatsumi Takehana (KHK, Japan)
- ☑ Tohru Nakanishi (METI, Japan)
- ☑ Volker Rothe (Stellantis/OICA)
- ✓ Warren Hepples (Luxfer)
- ☑ Wataru Okuyama (MLIT, Japan)
- ☑ Ylva Castenhag Blomström (Scania /OICA)
- ☑ Yoshinori Tanaka (NTSEL, Japan)

☐ Amy Ryan (Toyota/OICA) Ansgar Pott (Hyundai/OICA) Ayako Sugita (Toyota/OICA) Hans Lammers (RDW, Netherlands) Hisamoto (KHK, Japan) Hyungki Kim (Hyundai/ OICA) Junichi Tsukada (JASIC, Japan) Kai Ito (METI, Japan) Kawashima Tomoko Kazumi Watanabe (JASIC, Japan) Keobo Ku (Hyundai) Lukasz Rozanski (EU) Marco Aimo-Boot (Iveco/OICA) Marc Antoine Marcellin Marta Angles (IDIADA, Spain) Martin Koubek (NHTSA, USA) Mike Levet (DfT, UK) Myrna Cashatt (Linamar) Nick Hart (ITM Power)

Romain Ladret-Piciorus (EU Commission)

Toshinori Narumiya (KHK, Japan)

Paul Dijkhof (Kiwa)

☐ Yusuke Ito (KHK, Japan)☐ Yves van der Straaten (OICA)

Sava Tanaka

☐ Alexandra Mulot (Utac, France)

Minutes

- 1. Welcome & Roll call
- 2. Summary of the 72nd GRSP in December
 - (a) The informal document was presented by the secretariat and well received by the GRSP
 - (b) Amendments have been made to draft version due to the adoption of the proposal by France
 - (c) Deadline for submission of working documents for the 73rd GRSP is February 12, 2023
- 3. Review of comments document for submission to GRSP
 - □ OICA proposal
 - Remote TPRD requirements §5 (b) and §6.1
 - Include remote TPRDs in tests 5.2, 5.3 and 5.4
 - Addition of hydraulic sequential test
 - 6.1 imposes practicality issues for testing the supply lines of the remote TPRDs and is therefore not included

The primary closure devices shall be mounted directly on or within each container. [If needed, manufacturers may choose to locate additional TPRDs in alternative locations on the container. However, any additional TPRDs should be connected directly to the container by using supply lines that have demonstrated mechanical integrity and durability as part of qualification tests for the CHSS (i.e., hydraulic sequential test in paragraph 5.2., pneumatic sequential test in paragraph 5.4.) as well as the specific loads related to the integration of this components to the vehicle (i.e. crash, vibration).]

- There are cylinders in the market that have additional TPRDs and have been rigorously tested. So far, no issues have been reported.
- Conformity of production
 - Allow the use of hydraulic fluid or gas
 - Addition of

The quality variability of the products shall be assessed with a method defined by the manufacturer e.g., variability of elastic expansion, etc.

- o For tracking the quality variability is upon the manufacturer
- New proposal for batch testing alleviation after having established the repetitive quality of the product

9.2.2.23. <u>Upon request by the manufacturer after completion</u> of at least [20] sequential batches, including at least 2,000 finished containers, complying with the requirements of paragraph 9.2.2.1., the type approval authority may recognise alternative procedures for sampling CHSS from its production. In this case, appropriate measures to trace the quality control data, that are sufficient to monitor the production variances due to different factors e.g., material, process, environments, for each CHSS produced shall be implemented. The manufacturer shall conduct the tests specified in

paragraph 9.2.3. on CHSS randomly sampled according to the sampling rate determined by the manufacturer. In case that any defects are confirmed through the sampling tests, the manufacturer shall identify all the CHSS potentially having the same defects and take the appropriate measures to prevent further use of such CHSS. The sampling rate determined by the manufacturer shall be based on logical justifications and verified as a part of initial assessment in accordance with paragraph 9.1. Such sampling rate may include a strategy to adapt the sampling rate according to the factors influencing the stability of the product quality.

- o Alternative lateral impact test in §7.2.4.3
 - OICA still need to work on the test procedure for CHSS installation above 800 mm and will be able to share data by January 31.
- Justification paragraph will be completed

☐ Comments from Luxfer

- Change of the valve is it necessary, to conduct a pneumatic test on a CHSS if the valve has already been approved (GTR 13/UN ECE R134)?
 Agree that a Fire Test should be caried out
- There is a need to better specify what is meant by an "attachment of the cylinder". For example, is a neck mounting block an attachment? If the answer is yes, then all tests would have to be repeated. It would be inappropriate to repeat all tests for such a change

Response by OICA / CLEPA:

- Pneumatic test is to ensure proper functioning of the nozzle
- The change of design table is a guidance tool. The final decision lies with the Technical Service and the Type-Approval Authority.
- o Proposal to clarify the intent of Annex 7 para. 1 to add the following:
 - Modifications to an existing type approval of CHSS may be approved in accordance with the reduced test programme specified in Table 1 below. Deviations to this table may be allowed if equivalent safety can be ensured.

Material compatibility

- Alternative testing proposed by OICA in previous meeting cannot be accepted by Japanese expert
- The presentation shared by Luxfer on the HGSCC test is also seen controversially by the Japanese expert
- o A written statement will be provided the week of January 23 2023.
- Luxfer would like to discuss this further as a general discussion by the experts is needed. Otherwise the test will disallow perfectly acceptable materials.
- If the TF cannot agree on alternatives some members would prefer not to include requirements on material compatibility.

4. Other

- □ OICA had agreed to delete paragraph 9.2.2.2 (11,000 cycles x2.0) which is reflected in the new document.
- ☐ Minutes oft he November meeting have been resissued to correct participant list.

5. Next meeting

February 2nd 2023,

7.30 am to 9.30 am (CET) 3.30 pm to 5.30pm (JST/KST)