

**Report of the Preview Meeting of the
Informal Working Group on Panoramic Sunroof Glazing**



Location: WEBEX
Date: Tuesday, 4th October 2016, 12:00 – 13:30 CEST
Chair: Mr. Eom Sungbok (Republic of Korea), Mr. Richard Damm (Germany)
Secretary: Mr. Dr. Stephan Müller von Kralik (Germany / CLEPA)

1. Welcome and Introductions

Mr. Eom Sungbok, from KATRI (Korea Automobile Testing & Research Institute), Chair of the informal working group welcomed the participants.
19 people attended the meeting via WEBEX/Audio Conference.
The proposed agenda for the meeting was approved.

2. Review and discuss answering letter of KATRI to questionnaire of NHTSA

Ms. Lee (KATRI) went through the letter question by question (white dots).

- Matrix of KATRI was well prepared and no further questions by NHTSA
- Question of KATRI: NHTSA investigation is ongoing and only details, which are available on website can be forwarded
- Question on Korean roof products answered and no further questions by NHTSA
- Matrix of glass tests by KATRI: the wording for “pure” glass will be clarified and updated by KATRI. ( replaced to “annealed glass”) It is understood that 3m height is only due to limitation of testing device. The comment / line with Guardian Ind. will be removed.
- In principle the number of glass breakage of top load systems is similar to bottom load systems. No preference is seen. According to KATRI and OICA the local OEM's in Korea have a very high percentage of top load systems in vehicles and import % of vehicles is low.
- The amendment of the domestic vehicles with panorama roofs sold in 2011-2014 is not yet translated into English, but will be available until 10th October meeting.
- Matrix of tests of sunroofs by KATRI: Pictures of the roof systems on the test fixtures will also be available until 10th October.
- Additional information on glazing and ceramic paint compositions by KATRI was confirmed by GFE in general as more information is very difficult to provide
- Question by NHTSA to KATRI: Is there vehicle data available on breakages and ceramic composition on broken glass ? => KATRI: no data available.
- OPEN question from NHTSA for next IWG meeting on 10th October: **NHTSA had been informed that if the coefficients of thermal expansions for the glass panel and the frit glass were properly matched with the furnace, then there would be minimal to no loss in strength for the finished roof panel with CPA. Is this understanding correct?**
- Wording on “weaker” and “pure” glass will be updated by KATRI for 10th October ( replaced to “annealed glass”)
- Next 4 points: no further questions by NHTSA

Kommentar [Korea1]: I couldn't hear clearly at this point. But when I ask an expert from glazing manufacturer about this paragraph, this theory is correct.

- History of Japanese Analysis for homologation of GTR6 to 2,0m drop height for all glass thicknesses was explained by (MPA) Dr. Dümmler. Information on the Japanese Analysis is available in GTR 6 first Version.
- General review of NHTSA request to use 3m drop height. From experience and test data existing MPA stated that glass, which does not pass the 2,5m drop height, will also not pass the 2,0m drop height with 227g ball test and therefore a 3m height does not give additional robustness.
- A new test (shot bag test) will not give very much more additional information on robustness of a toughened glass with / without CPA as it is well known that CPA weakens the glass and the 227g ball test will fail, if the CPA area is hit. Which is confirmed also by KATRI Glass test matrix.

3. Amendments of other members to questionnaire of NHTSA

The amendments and comments of other members to the questionnaire are included above.

4. Proposed agenda for next IWG PSG meeting in Geneva on 10th Geneva

Basic target of next meeting shall be to review still open questions of NHTSA questionnaire and to discuss proposals for amendments to GTR 6 for final decision by IWG.

5. Any other business

None

6. Closing remarks

Chairman thanked all attendees for taking part of the preview and their support to the questionnaire of NHTSA.
