

Submitted by the representative of
the Republic of Korea

Informal document WP.29-164-25
(164th WP.29 session, 11-14 Nov, 2014
agenda item 8.9)

**Request for a mandate for the Informal Working Group to
develop amendments to UN GTR No. 6 on Safety Glazing
(Panoramic Sunroof Glazing)**

Requested by the representative of the Republic of Korea

This document contains a proposal to establish an informal working group on Panoramic Sunroof Glazing (PSG). The aim is to improve in UN GTR No. 6 and UN Regulation No. 43 the test requirements for such glazing.

Request for a mandate for the Informal Working Group to develop amendments to UN GTR No. 6 on Safety Glazing (Panoramic Sunroof Glazing)

A. Objective

1. The main objective of this proposal is to develop, in the framework of the 1998 Agreement, an amendment to UN Global Technical Regulation (GTR) No. 6 on Safety Glazing concerning clarification of testing and evaluating methods (e.g. 227g ball drop test), etc. in determining the mechanical strength of toughened glass so that the safety of a panoramic sunroof is assured.
2. The representative of the Republic of Korea proposes establishing a new Informal Working Group (IWG) on safety glazing under the Working Party on General Safety Provision (GRSG). The new IWG will discuss appropriate methods for testing and evaluating the mechanical strength of a part that is weaker than other parts, such as the opaque obscuration area (ceramic printed area). Should the existing standards be determined inappropriate to assessing the mechanical strength of a toughened glass that constitutes a panoramic sunroof, the IWG will proceed to discuss relevant directions for the amendment of the rules and regulations pertaining to UN GTR No. 6.

B. Background

3. The Government of the Republic of Korea had conducted a defect investigation of panoramic sunroof in 2013 due to a sharp increase in consumer complaints about the safety of panoramic sunroof. Results of the investigation confirmed that the ceramic printed area of panoramic sunroof is particularly vulnerable in terms of its mechanical strength and thus does not meet the requirements under UN GTR 6. The Government of the Republic of Korea reported the results of its defect investigation of panoramic sunroof at the WP.29 March 2014 session in an informal document (WP.29-162-15) and also at the GRSG meeting held in May 2014 in another informal document (GRSG-106-21).
4. Subsequently, the Government of the Republic of Korea proposed to develop an amendment to UN GTR No. 6 in a way that clarifies the existing definition of toughened glass and revises the methods (227g ball drop test) for testing and evaluating the mechanical strength of toughened glass at the 107th GRSG meeting in September 2014. The Government of the Republic of Korea also proposed establishment of an IWG to develop an amendment to the relevant parts of UN GTR No. 6, and that proposal was endorsed by GRSG.
5. Once established, the new IWG will invite all parties to join the group and share their experiences regarding development of relevant regulatory requirements and market responses. Participants of the group will exchange information on the direction of safety glazing technology development and discuss ways for it to measure up to future regulatory requirements.
6. The Government of the Republic of Korea will actively participate in the IWG as a technical sponsor in an effort to develop necessary amendments to UN GTR No. 6 and UN Regulation No. 43.

C Subject of tasks to be undertaken by the new IWG

7. With regards to the definition of toughened glass, the IWG will review the issue of whether the current definition of toughened glass is appropriate to assure the safety of panoramic sunroof. If further clarification of the existing definition is deemed necessary, it will proceed to more clearly define the mechanical properties of toughened glass. One way to do so, for example, would be to mandate toughened glass to be stronger than its former state, i.e. before it underwent the toughening process.
8. With regards to the 227g ball drop test, the IWG will discuss methodologies as follows:
 - (a) Setting the target of the strength test to be limited to a testing piece the size of 30cm x 30cm only
 - (b) Allowing the testing piece to represent the characteristics of the finished product of a window glass, provided that the ceramic coated area necessary for fixing and obscuring the glass at a minimum level is made excluded from the point of impact of a ball drop test.
 - (c) Eliminating any discrepancies with other relevant regulations (e.g. UN Regulation No. 43)
9. In addition, the IWG may review whether further amendment would be necessary concerning the existing categorization of window glasses applicable to windscreens, other windows of a vehicle, and sunroofs.

D. Timeline

10. The plan will regularly be reviewed and updated to reflect the progress and the feasibility of the timeline.
 - (a) 11-14 November 2014: At the 164th session of WP.29, agreement on the establishment of Informal Working Group on safety glazing submitted to the AC.3.
 - (b) 10-13 March 2015: At the 165th session of WP.29, official adoption of the establishment of Informal Working Group on safety glazing undertaken at the AC.3
 - (c) May 2015: Kick-off meeting of the IWG. Discussion on the Terms of Reference and composition of chair, vice chair and secretaries of the IWG.
 - (d) May 2015: Meeting of the IWG in conjunction with the 108th session of GRSG. Final decision of Terms of Reference and election of chair, vice chair and secretaries of the IWG. Adoption of Terms of Reference for the IWG by GRSG.
 - (e) June 2015: At the 166th session of WP.29, agreement on Terms of Reference for IWG on safety glazing obtained at the AC.1.
11. The Chairs of IWG will manage various aspects of the task, ensuring the agreed action plan is implemented with its goals and work schedules set and met properly.
 - (a) 2015-2016: Meeting of the IWG, regular reporting to the Administrative Committee.
 - (b) November 2016: Adoption of the amended Global Technical Regulation and UN Regulation.