



Brussels, 8 March 2012  
D5/PB D(2012) Peter Broertjes

## Minutes

### **informal pre-meeting concerning modification of the legform test procedure**

**(practical issue and general observation decreasing legform test areas for type-approved vehicles)**

**Osaka, Japan, 27 March 2012**

\* \* \*

#### **1. Opening of informal meeting by Mr. Walter Schulz (General Manager TUV Rheinland Japan)**

Peter Broertjes/European Commission welcomed the attendees and thanked them for their interest in the subject.

Walter Schulz/TUV Rheinland Japan Ltd. welcomed the people at the TUV Rheinland offices in Osaka and introduced the activities of TUV Rheinland in Japan as well as regarding pedestrian safety in Japan and Europe.

Broertjes	Peter	Mr.	European Commission (European Union/Belgium)
Damm	Richard	Mr.	Federal Ministry of Transport, Building and Urban Development (BMVBS) (Germany)
Heß	Christian	Mr.	Audi (Germany)
Kawakita	Masakatsu	Mr.	TUV Rheinland Japan
Kim	Taeyong	Mr.	Korea Automobile Testing & Research Institute (KATRI) (Korea)
Kinsky	Thomas	Mr.	General Motors Europe/Opel (Germany)
Konosu	Atsuhiko	Dr.	Japan Automobile Research Institute (JARI) (Japan)
Nguyen	Nha Thanh	Mr.	National Highway Traffic Safety Administration (U.S.A.)
Ries	Oskar	Dr.	Volkswagen (Germany)
Schulz	Walter	Mr.	TUV Rheinland Japan
Takagi	Shunsuke	Mr.	National Traffic Safety and Environment Laboratory (NTSEL) (Japan)
Thedinga	Albertus	Mr.	TUV Rheinland Japan

## **2. Clarification of the aim of the informal meeting by Peter Broertjes (EC)**

Mr. Broertjes introduced the subject of the concerns of the European Commission: Several manufacturers use design features to limit the width of the test area for the bumper test. Mr. Broertjes pointed out that this is clearly not against legislation which is very clear in this point. However, the Commission fears that the modifications may decrease safety of pedestrians that are involved in accidents with cars.

## **3. Informal discussion on the issues observed and potential improvements to the regulatory text:**

- is this a matter circumvention of the legislation?
- is it justified that a cost/benefit analysis should be provided in such a case?
- ...?

Mr. Damm/German Ministry of Transport presented the document GTR9-2-03 that was handed in by Mr. Zander/BASSt for the upcoming meeting of the Informal Group on GTR No. 9 – Phase 2. Some discussion already came up during this on the historic reasons for the 60° planes: Early documents of EEVC were talking about 45° planes to be used. However, even in EEVC it was felt necessary to have more research on this.

Dr. Ries/Volkswagen mentioned that it is sometimes quite hard to follow the discussion that was held more than 20 years ago. Mr. Kinsky/GM Europe added that according to his knowledge there are 2 main reasons for limiting the impact area according to the 60° planes: a pedestrian who is struck by a vehicle at the side usually does not hit the vehicle surface but is tossed away AND the impactor's design limits its ability to bend sideward so that no reliable and repeatable test results can be achieved.

BASSt introduced 2 proposals to avoid that pure design features are used to limit the test area:

- either the whole vehicle front is tested, defining the front just via the vehicle's width (excluding only the mirrors),
- or the definition used in Euro NCAP can be used where the wider of the two areas, formed either by the 60° planes or by the width of the structure lying behind the surface, is used for testing.

Mr. Hess explained that for both cases he has concerns with the impactor's abilities. Reliable and repeatable testing may not be possible.

Mr. Damm concluded that BASSt for the time being proposes to test the whole width of the vehicle since this covers the accident risk for a pedestrian.

Discussion came up on what a possible solution could be. Mr. Nguyen/NHTSA as well as Mr. Broertjes pointed out that the solutions used by manufacturers are following the legislation. However, they nevertheless may not be perfect for the safety of pedestrians.

Mr. Nguyen however stated that he would need a little bit more time to assess the problem in detail.

Mr. Kinsky wondered whether some experiences of Euro NCAP testing are already available. Besides this, other solutions proposed e.g. by BAST would need more scientific justification. Mr. Broertjes added that he also sees concerns with e.g. the headlamps that are very rigid and therefore should be somehow considered in the testing. Mr. Kinsky replied that the headlamps have become heavier to provide better visibility, which also helps pedestrians.

Mr. Thedinga/TUV Rheinland Japan asked whether test results outside the bumper corners indeed show high values. Mr. Broertjes mentioned that he was told by Euro NCAP experts that this can happen. Attendees from industry explained that this usually only happens when the foam that is used to absorb impact energy and which is put in front of the bumper beam. Mr. Kim added that Korea is following the Euro NCAP procedure with K-NCAP since they share the concerns of Euro NCAP.

An intense discussion on possible solutions came up. However, it was finally concluded by Mr. Broertjes that discussion may last unlimited and therefore he proposes to have an activity list that provides a clear plan for next steps.

On request of Mr. Broertjes Mr. Damm explained that the IG GTR9-PH2 should deliver a proposal by around May 2013 the latest. This should provide sufficient time to conclude this activity. Mr. Broertjes therefore proposed to have a task force dedicated to this subject. This TF can report to IG GTR9-PH2 on their findings. Mr. Broertjes asked whether TUV Rheinland with its subsidiary TTAI (TUV Rheinland TNO Automotive International, located in Helmond/The Netherlands) can support this. Most meetings could take place via WebEx and only a limited number of physical meetings at certain milestones would need to take place. The Commission plans to launch a tender for these activities.

However, some attendees explained that using WebEx for such meetings may not be a good solution since the IT security rules of their companies prevent them from attending such meetings. Therefore, other solutions should be looked for.

Additionally, the Japanese delegation was worried whether the bumper area discussions can be finalized by May 2013. The main task of the IG GTR9-PH2 is to introduce the FlexPLI in the gtr9 as well as in the UN Regulation. So, if the bumper area discussions will not be finalized by May 2013, it shall be discussed separately with the IG GTR9-PH2 activity. All participants agreed on the Japanese delegation's proposal.

#### **4. Agreed necessary actions**

It is agreed that the following activities should be undertaken:

- All attendees check whether they can provide additional information on the reasons why the test area was limited to 60°. (Manufacturers will contact Dr. Cesari/INRETS ( [Dominique.Cesari@inrets.fr](mailto:Dominique.Cesari@inrets.fr) ) on this since Dr. Cesari is one of the long-time experts of the respective EEVC working group.)

- Findings on test results etc. will be shared before the May GRSP session in Geneva. (All)
- Accident data should be checked whether they provide an indication for the need of the extension of the test area. (BASt, all)
- By the May 2012 meeting of the IG GTR9-PH2, the Commission will contact attendees individually for further support.
- In September, a first WebEx meeting should take place. (European Commission)

## **5. Next steps, discussion, meeting**

The following questions need to be solved, also depending on the outcome of the activities mentioned above:

What threshold is critical for the test tool (rotation etc.)?

Can the 60° planes be changed or do they need to be maintained?

Which are the areas relevant for pedestrian protection (specifically for leg injuries) on the vehicles' front ends?

Can these areas be tested?

Can rotational effects of the impactor during a test lead to problems e.g. with repeatability for certification testing?

## **6. Conclusion of the meeting**

Mr. Broertjes thanked the attendees and especially TUV Rheinland Japan for their support to make the meeting a success.