

Informal document GRSP-51-26
(51st GRSP, 21 - 24 May 2012,
agenda item 15)

51st GRSP Session

Status report of Informal Group on FI

Pierre CASTAING
Chairman

Mandate of the informal group on Frontal Impact

- **Report of the Working Party on Passive Safety on its Fiftieth session (Geneva, 6–9 December 2011)**
 - 31. The Chair of the informal working group on Frontal collision introduced ECE/TRANS/WP.29/GRSP/2011/24 through a presentation (GRSP-50-01) on the new terms of reference of the informal working group. GRSP adopted ECE/TRANS/WP.29/GRSP/2011/24 as reproduced in Annex V to this report and sought the consent of WP.29 at its March 2012 session.
- **Reports of the World Forum for Harmonization of Vehicle Regulations on its 156th session (Geneva, 12-16 March 2012)**
 - 36. Regarding Regulation No. 94 (Frontal collision), he informed WP.29 that GRSP had adopted the new terms of references of the informal group, as reproduced in Annex V of the GRSP report (ECE/TRANS/WP.29/GRSP/50). The World Forum endorsed in principle the above mentioned terms of references, pending the adoption of the report of the December 2011 session of GRSP.

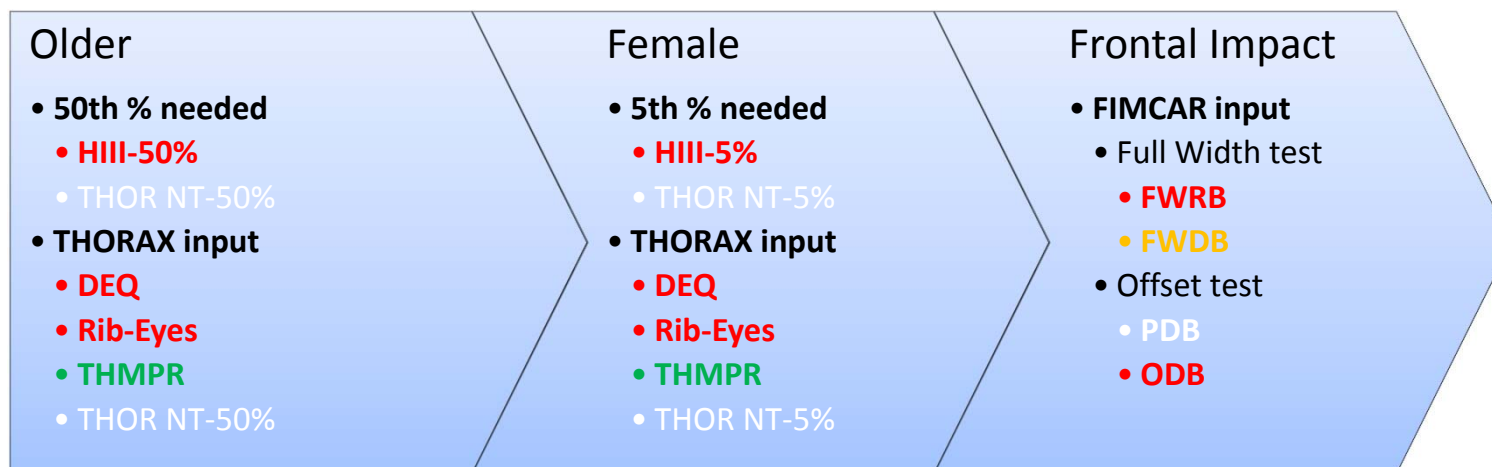
New terms of reference for the mandate to the informal working group on frontal collision

1. The informal working group shall consider the update of Regulation No. 94 on protecting older occupants, female occupants and also focus on optimization of vehicles' structural interaction to improve self-protection and partner protection.
2. The informal working group will make use of existing tools, consider and develop the results of ongoing research and validation programs.
3. In particular, the informal working group expects to make use of results from:
 - (a) Frontal Impact and Compatibility Assessment Research (FIMCAR) on the set of test procedures **(target end of 2012)**;
 - (b) Thoracic injury assessment for improved vehicle safety (THORAX) on thorax injury prediction tools **(target mid 2012)**;
 - (c) An expert group who will validate the use of thorax injury prediction tools (deflection equivalent (DEQ), Thorax Multi-Point and high Rate measurement device (THMPR) and Rib Eye) for the Hybrid III dummy **(target end of 2012)**;
 - (d) An expert group who will conduct an impact assessment **(until the end of 2013)**.
4. As a first step following these results, the group will propose a final draft for amendment to Regulation No. 94, for GRSP at its **May 2014 session**.
5. A second step would be to improve the Regulation, preferably by means of a global technical regulation (gtr), starting at least mid-2014, depending on the availability and the progress of the Test Device for Human Occupant Restraint New Type (THOR NT) with input from the research project THORAX.
6. The informal working group encourages collaboration on the development of a harmonized THOR dummy for this second step.
7. A "grandfathering" clause could be used for the second phase, so that the new requirements may apply only to completely new vehicle designs.
8. The informal working group submits the above proposal for comments and endorsement to GRSP experts to seek consent from the World Forum for Harmonization of Vehicle Regulation (WP.29) for an extension of the **mandate of the informal working group until the end of 2014**.

Meetings

- 15th Meeting - 18 April 2012 – OICA Paris
- 16th Meeting – 11 October 2012 – OICA Paris

Possible scenario for amendment of ECE R94



Phase 1

Target date for a draft amendment **End of 2014**

Open issue FWRB / FWDB

	Today:	Phase I: ~2014	Phase II: ~ 2020 (GTR?)
Scope	Self Protection Fuel Integrity	Self Protection Fuel Integrity + Restraint Test + Compatibility Assessment	Tbd.
Configuration	ODB 56 km/h, 40%	ODB 56 km/h, 40% + FWRB 50 km/h + [Geometric Assessment PEAS / SEAS]	
Dummy	HIII 50%	HIII 50% [HIII 50%, HIII 5%]	[THOR %]

OICA, Japan and some member states are in favour of harmonisation in phase I

The discussion of FWDB, PDB & THOR is still open for phase II

Expertise needed

- An expert group to validate the use of thorax injury prediction tools (DEQ, Rib Eye) for the H3 (target end of 2012)
 - Work done in parallel with Euro NCAP
(Biomechanical workshop scheduled in Paris the 11th July)
- An expert group to conduct an impact assessment until the end of 2013

Open issue

- Availability of dummies definition and parts:
 - 5th percentile harmonised jacket