

**Minutes of 13th meeting of  
the Informal Group on Frontal Impact**

**OICA office**

**4 RUE DE BERRI**

**75008 PARIS**

Monday, 27<sup>th</sup> June 2011

**1. Welcome**

The chairman Pierre Castaing opened the meeting and welcomed the delegates. The target of today's meeting is basically to develop new terms of reference for the group.

**2. Roll call**

**3. Adoption of the agenda**

**Doc. INF GR / FI-13-01**

The Agenda was adopted after adding a bullet point for the request from the RESS group

**4. Adoption of the Minutes of last Meeting**

**Doc. INF GR / FI-12-06**

The minutes from the 12<sup>th</sup> meeting has been adopted without amendments.

**5. Request of RESS group**

**Doc. INF GR / FI-13-02**

**Doc. INF GR / FI-13-03**

The RESS group raised some questions to the IWG R94.

The IWG R94 discussed that the scope of the tests shall not be changed. It might however be useful to check the exemptions, which some regulations allow for. E.g. R95 has exemptions for cars with R point > 700mm which are based on occupant protection arguments, but which might be misleading with regard to fuel system integrity. It might be useful to split the regulation and add a fuel integrity regulation, like the ECE R17 has been added for the seat component.

It was decided to recommend not changing the scope of current regulations ECE R12, R94 and R95.

For those vehicles which do not have to fulfil R94, ECE R12 will be a minimum requirement. Vehicles which fulfil regulations ECE R94 and R95 do not necessarily need to fulfil the component tests. For component tests a type dependent R17 pulse shall be used, like it is shown in the document of the RESS group RESS03-03.e.pdf, or document FI-13-03 respectively.

## **6. Future terms of reference**

**Doc. INF GR / FI-13-04**

**Doc. INF GR / FI-13-05**

The group discussed the next steps based on the scenarios shown in document FI-13-04 during the May GRSP session by the chairman of IWG R94. It was agreed that the final step should be the introduction of the THOR dummy into the regulation. However, taking into account that mid-term improvements in particular for vulnerable occupants shall be reached, a modified H3 – considering options like THMPR, RibEye - version with improved criteria like DEQ could be used. It was agreed that an expert group shall consider and suggest such possibilities. It was furthermore suggested that the THORAX project shall also evaluate the application of such modifications.

A document of new terms of reference has been produced – document FI-13-05 - and has been approved so far.

## **7. AOB**

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## **8. Next Meetings**

7<sup>th</sup> of September 2011, Paris, OICA office, Rue de Berri (10:00 – 17:00 full day)

Action Number	Action	Target Date	Action By	Comp Date
3.				
3.1.	Amend the minute of the first meeting	09/03/10	Secretary	09/03/10
3.2.	Amend the minute of the second meeting	09/03/10	Secretary	09/03/10
3.3.	Document on German accident analysis: for March meeting	09/03/10	Germany	postponed
3.4.	Document on French accident analysis: more detailed	09/03/10	France	09/03/10
3.5.	Injury mechanism (thorax injury)	09/03/10	Sweden	09/03/10
3.6.	Thorax Injury frequency	09/03/10	All	postponed
3.7.	Update of EU project SARAC I&II	09/03/10	Germany	postponed
3.8.	Input from VC-Compat	09/03/10	Sweden	postponed
3.9.	EES Calculation method =>Put the software on the PDB web site.	09/03/10	France	09/03/10
3.10.	PDB test result on heavy weight cars	09/03/10	Japan	09/03/10
3.11.	Update the Swedish document	09/03/10	Secretary	09/03/10
3.12.	VDA to present Document FI_03-09	09/03/10	VDA	09/03/10
3.13.	Input open questions, what is missing, next steps	09/03/10	All	open
4.				
4.1.	Document on German accident analysis: for May meeting	25/05/09	BASSt	25/05/09
4.2.	Document on French accident analysis: more detailed for May meeting	25/05/09	France	25/05/09
4.2.1.	Eliminate the older cars	25/05/09	France	25/05/09
4.2.2.	Check if there are 30 people also outside the car for the partner protection.	25/05/09	France	25/05/09
4.2.3.	Compare the fatality rate with the current two categories (single car and car-car)	25/05/09	France	25/05/09
4.3.	Thorax injury frequency :report similar data than Doc FI_03-06	25/05/09	All	
4.4.	Thorax injury frequency: update data from EU Project SARAC I&II	25/05/09	Germany	closed
4.5.	Results on car-car tests and explain the higher passenger loadings and the barrier calculation.	25/05/09	Japan	
4.6.	UK, NI, Japan are asked to prepare a position on the VDA presentation	25/05/09	All	open
4.7.	Amend Document FI_03-09 to focus on frontal impact	25/05/09	VDA	

Action Number	Action	Target Date	Action By	Comp Date
4.8.	Present the methodology for PDB introduction in the regulation.	25/05/09	France	25/05/09
5.				
5.1.	Propose solutions to solve the problem of car to car accident	15/09/09	All	
5.2.	Do similar exercise than Doc. INF GR / FI-05-04 proposed by Sweden	15/09/09	All	
6.				
6.1.	Extension of German Accident Analysis	7/12/09	BASSt	7/12/09
6.2.	Extension of French Accident Analysis	7/12/09	LAB	postponed
6.3.	European Accident Analysis (PART 1)	7/12/09	TRL	7/12/09
6.4.	Input from Accident Analysis done for EU-Project Thorax	7/12/09	TRL/BASSt	postponed
6.5.	Reference Collision Data based on Real World Accidents	7/12/09	BASSt	open
6.6.	Review Doc. INF GR / FI-05-07 presented by France	7/12/09	ALL	7/12/09
7.				
7.1.	Japanese benefit analysis for a Full Width Test for March 2010 meeting	04/03/10	Japan	postponed
7.2.	Extension of French Accident Analysis	04/03/10	France	04/03/10
7.3.	European Accident Analysis on behalf of the European Commission (PART 2)	04/03/10	TRL	postponed
7.4.	Input from Accident Analysis done for EU-Project THORAX	04/03/10	TRL / BASSt	postponed
7.5.	Reference Collision Data based on Real World Accidents	04/03/10	BASSt	open
7.6.	Time schedule	04/03/10	ALL	04/03/10
8.				
8.1.	Japanese benefit analysis for a Full Width Test	27/04/10	Japan	14/10/10
8.2.	Paper on the groups conclusions to present in May 2010 to GRSP	27/04/10	Chairman	14/10/10
8.3.	European Accident Analysis on behalf of the European Commission (PART 2)	27/04/10	TRL	14/10/10
8.4.	Input from Accident Analysis done for EU-Project THORAX	27/04/10	TRL	27/4/10
8.5.	Input from Accident Analysis done for EU-Project FIMCAR	27/04/10	TUB	14/10/10
8.6.	Input from Accident Analysis done for former EU-Project APROSYS	27/04/10	Mr. Schramm	cancelled

Document Number	Title	Origin
13.7	Frontal Impact Cost-Benefit and Potential Options	EU/TRL
13.6	Minutes of the 13th meeting	Secretary
13.5	Draft new ToR for IWG R94	IWG R94
13.4	GRSP Status Report May 2011	Chairman
13.3	Proposal to structure RESS safety requirements	RESS group
13.2	RESS request to IWG R94	RESS group
13.1	Agenda of the 13th Meeting of the informal group on frontal impact	Secretary
12.6	Draft Minutes of the 12 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
12.5	Equivalent Deflection – an improved chest criterion	LAB
12.4*	THOR NT Status Report	NHTSA
12.3	FIMCAR Full Width Test Status Report	TRL/FIMCAR
12.2	FIMCAR General Status Report	VTI/FIMCAR
12.1	Agenda of the 12 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
11.6	Draft Minutes of the 11 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
11.5	Stapp Paper 2003 on new thoratic injury criterion	Peugeot
11.4	Schedule for IWG R94	Group
11.3	GRSP Informal Group Frontal Impact_Timelines	OBrian
11.2	FIMCAR Workshop 19/1/11 Summary	TUB
11.1	Agenda of the 11 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
10.9	Draft Minutes of the 10 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
10.8	FIMCAR Status of Full Width Test Metric	BASt
10.7	FIMCAR Accident Analysis Findings	TRL

10.6	FIMCAR General Strategy	TUB
10.5	NTSEL Benefit analysis for a Full Width Test.	NTSEL
10.4	EC Accident Analysis – Final Report	TRL
10.3	EC Accident Analysis – Summary Presentation	TRL
10.2	GRSP IWG R94 Status Report May 2010	Chairman
10.1	Agenda of the 10 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
9.8	Draft Minutes of the 9 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
9.7	Japanese benefit analysis for Full Width Test – provisional	Japan
9.6	FIMCAR UK accident analysis headlines	TRL
9.5	FIMCAR presentation for GRSP IWG R94	TUB
9.4	COVER and THORAX work related to frontal impacts	TRL
9.3	EC Accident Analysis (provisional)	TRL
9.2	GRSP IWG R94 Draft Status Report May 2010	Chairman
9.1	Agenda of the 9 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
8.5	Minutes of the 8 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
8.4	Extension of French accident analysis to European Scope	France
8.3	Future steps – important points for R94 change	Secretary
8.2	IWG R94's GRSP position after December 2009 session	Chairman
8.1	Agenda of the 8 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
7.7	Minutes of the 7 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
7.6	Presentation on ideas to amend R94	Germany
7.5	Presentation on possibilities to avoid misuse of the PDB	France

7.4	Presentation to review open questions	Sweden
7.3	Presentation on the first results of a frontal impact study by order of the EU Commission	UK
7.2	Presentation on updated German accident analysis	Germany
7.1	Agenda of the 7 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
6.6	Draft Minutes of the 6 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary
6.5	Update work on reference collision	Sweden
6.4	Presentation on MPDB problems	France
6.3	Presentation on frontal impact issues	UK
6.2	Report on frontal impact issues	EU-Commission
6.1	Agenda of the 6 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
5.10	Minutes of the 5 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
5.9	dummies-position in Japanese tests	Japan
5.8	joint-researches-USA-France-presentation	France/USA
5.7	French-answer-to-R94amendement-issues	France
5.6	R94-METHODOLOGIE-BENEFITS-May-2009	France
5.5	PDB Research in JPN Mini-Cars & Minivan & PC	Japan
5.4	Swedish-Accident Data Review	VTI
5.3	French-accident-data-analysis	LAB
5.2	German-accident-data-analysis	BASt
5.1	Agenda of the 5 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
4.6	Final minutes of the 4 <sup>th</sup> Meeting of the informal group on frontal impact	Secretary

4.5	Contract with EC: Provision of information for the development of frontal impact legislation	TRL
4.4	Performance as Test Procedures of the PDB and ODB Tests for the Light and Heavy Cars	Japan
4.3	Injuries Reported in Frontal Impacts in Swedish Accident Data	VTI
4.2	Work progress regarding Self-Protection and Partner-Protection	LAB
4.1	Agenda of the 4 <sup>th</sup> Meeting of the informal group on frontal impact	Chairman
3.12	Draft minutes of the 3 <sup>rd</sup> Meeting of the informal group on frontal impact	Secretary
3.11	PDB research in Japan	Japan
3.10	Mobile Progressive Deformable Barrier and Mobile Rigid Barrier Tests	BASt
3.09	Detailed discussion of the VDA position on the proposal for draft amendments to UN-ECE R94	VDA
3.08	Influence of the PDB on the pulse	France
3.07	Additional research on PDB and MPDB	Netherlands
3.06	Evolution of mortality rate and fatal injury frequencies in Frontal impact since 1990.	France
3.05	APROSYS - Development of a Full Width Frontal Impact Test for Europe	UK
3.04	Single Vehicle Collisions - Extracts from the RISER project.	Sweden
3.03	Accident analysis - Work progress regarding Self-Protection V2	LAB
3.02	Evaluation of the Effect of the Implemented Full-Width Frontal Impact Standard on Reduction of Fatalities in Japan	Japan
3.01	Agenda of the 3 <sup>rd</sup> Meeting of the informal group on frontal impact	Chairman
2.09	Minutes of the 2 <sup>nd</sup> Meeting of the informal group on frontal impact	Chairman
2.08	VDA position on the proposal for the draft amendments to Regulation N°94	VDA
2.07	Japan research on Regulation N°94 amendments	Japan
2.06	Outstanding issues with PDB test	UK



**Annex 3 –Documents list****INF GR /FI-09-08\_draft**

2.05	Accident analysis - Work progress regarding Self-Protection V1	LAB
2.04	First finding of additional research	Netherlands
2.03	UNECE Reg. 94 – Past, Present & Future	Netherlands
2.02	Issue to be resolved in evaluation of Regulation N°94 amendments	Secretary/Sweden
2.01	Agenda of the 2 <sup>nd</sup> Meeting of the informal group on frontal impact	Chairman
1.04	Draft Minutes of the 1 <sup>st</sup> Meeting of the informal group on frontal impact	Secretary
1.03	Agenda of the 1 <sup>st</sup> Meeting of the informal group on frontal impact	Chairman
1.02	Proposal of rules of procedure and terms of reference	Chairman
1.01	ECE/TRANS/WP.29/GRSP/2007/17 – Proposal for draft amendments	France