

INF GR /FI-11-06_draft
Minutes of 11th meeting of
the Informal Group on Frontal Impact

Meeting room 12/A
European Commission
DG Enterprise and Industry
Avenue d'Auderghem 45
1040 Brussels
Belgium
Thursday, 20 January 2011

1. Welcome

The chairman Pierre Castaing opened the meeting and welcomed the delegates. The target of today's meeting is basically to develop a tentative agenda for GRSP.

2. Roll call

3. Adoption of the agenda

Doc. INF GR / FI-11-01

The Agenda was adopted. There is an additional presentation about the conclusions from the FIMCAR Workshop of January, 19th 2011 by the FIMCAR coordinator Mr. Johannsen. There is also a statement about the status of the European THORAX project added to the agenda.

4. Adoption of the Minutes of last Meeting

Doc. INF GR / FI-10-09

The minutes have not been discussed. Obviously there has been a problem with file size limitations. Consequently minutes and documents of the last meeting have not been received by all members. The missing documents have been circulated during the 11th meeting and will be reloaded to the UNECE webpage as soon as possible.

5. Presentations

Doc. INF GR / FI-11-02

5.1. Conclusion of FIMCAR Workshop 19/1/11

Mr Johannsen presented the preliminary results of the FIMCAR Workshop from January, 19th 2011. With regard to the Accident Analysis Task differences have been seen for the large and small overlap scenarios in UK and German accident data. In particular it must be observed in more detail, why small overlaps are more frequently a cause of severe car occupant injuries in Germany than in UK. Similar problems with small overlaps have been seen by the ADAC and by IIHS. It shall be examined whether small overlaps take place in the middle of the car or outside the cars

longitudinal.

Mr. Johannsen gave a short overview on the guest presentations at the workshop. He reflected on the expectations of the US who believe in a change of the car fleet due to “carbon fingerprint”. This can change the dimension of the mass incompatibility problem. As regards the overall strategy Mr. Johannsen expressed that the general tendency was to introduce rather one big step instead of two small steps.

Mr. Johannsen reported that there was no decision being taken during the workshop as regards preferring rigid or deformable barrier full width testing. It was however strongly supported to have a SEAS structure assessment, but without any restrictions towards car design.

As regards more advice from FIMCAR to IWG R94 Mr. Thomson explained that in October/November 2011 decision on the test criteria will be taken.

With regard to CBS Mr. Johannsen explained that a benefit assessment of the different test tools will be provided in the end of 2012. No work on the costs will be done. In particular there are no resources available in FIMCAR to conduct a cost assessment.

Mr. Pott said that test procedures and thresholds need to be provided in order to make it possible to calculate costs for the manufacturers.

Mr. Edwards asked about the implementation of dummy criteria within FIMCAR and whether it was intended to copy dummy criteria from other sources or to give no advice on that issue. Mr. Johannsen replied that there will most probably be no advice on that matter. Mr. Adolphs added that there is no great communication between FIMCAR and THORAX EU projects and that coordination work is necessary to combine the results of both projects.

Mr. Thomson remarked that it was desirable to have Thorax prototypes included in the FIMCAR tests.

5.2. EU Project THORAX – Overview

Mr. Adolphs gave a short oral statement about the European THORAX project. The THORAX project is intended to run from 2009 to 2012. The target is to develop a modified thorax for the THOR dummy. In a first step an accident analysis has been conducted and is finalized. A demonstrator shall be validated, which will most probably be a slightly modified (rib stiffness) and reequipped (CHALMERS shoulder) NHTSA THOR thorax.

As regards output for the IWG R94 four options are possible:

- Using the H3
- Using the H3 with multipoint measurement
- Waiting and using the THOR (SAE)
- Waiting and using the THOR (SAE) with modified thorax measurement from the

THORAX project

Doc. INF GR / FI-11-03

Mr. OBrian presented a schedule of a probable federalization and introduction in regulation scenario for the NHTSA THOR (SAE).

Mr. Ammerlaan commented that waiting for the NHTSA THOR (SAE) might be too longsome and suggested to use the H3 in a modified version.

Mr. Slaba answered that this might result in a two step approach, having a modified H3 first and a final THOR later on. Too many changes within a regulation are not acceptable from an industry point of view and shall be avoided.

Mr. Ammerlaan referred to the similar discussion during the development of the WorldSID, where a modified ES2 has been introduced into the side impact regulation. Experience with the WorldSID has shown that the design of a new dummy suffers from imponderabilities and usually takes longer. Mr. Ammerlaan expects a similar scenario for the final THOR development.

Mr. Adolphs remarked that the results of the THORAX project will be monitored and considered by NHTSA.

Mr. Castaing sees the risk of introducing a non harmonized THOR into the regulation. Therefore the H3 with multipoint measurement could be a good option.

Mr. Broertjes noted that there is no need for the group to find and select the best and most sophisticated solution. It is also not intended to put an unacceptable burden on the industry. Waiting for the new THOR can also result in “own ways” of parties and in disharmonization. One harmonized way forward could be to copy the current test from Japan, which is done with a 50th percentile H3.

Mr. Ammerlaan commented that adding a 5th percentile H3 to the Japan test could bring a big benefit.

Mr. Slaba doubts that introducing a modified H3, which will need validation and testing as well, will be faster than waiting for the NHTSA THOR (SAE) dummy.

Comments have been made that it might be sufficient to change the measurement unit only and not to influence the dummy’s mechanics. In particular the “THMPR” and the “rib eye extension” unit could be available. It might however be more difficult to develop a connected criterion for the restraint system.

Mr. Casting suggested having dummy experts available at the next IWG R94 meeting to get more details on the dummy issues.

6. AOB

-

7. Next Meetings

30th of March 2011, London or Barcelona t.b.a. , (9:30 – 16:30 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	BASt	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/BASt	postponed
6.5.	Reference Collision Data based on Real World Accidents	7/12/09	BASt	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 / BASt	postponed
7.5.	Reference Collision Data based on Real World Accidents	04/03/10	BASt	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
11.6	Draft Minutes of the 11 th 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 th Meeting of the informal group on frontal impact	Secretary
10.9	Draft Minutes of the 10 th 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 th Meeting of the informal group on frontal impact	Chairman
9.8	Draft Minutes of the 9 th Meeting of the informal group on frontal impact	Secretary
9.7	Japanese benefit analysis for Full Widt 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 th Meeting of the informal group on frontal impact	Chairman
8.5	Minutes of the 8 th 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 th Meeting of the informal group on frontal impact	Chairman
7.7	Minutes of the 7 th 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 th Meeting of the informal group on frontal impact	Chairman
6.6	Draft Minutes of the 6 th 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 th Meeting of the informal group on frontal impact	Chairman
5.10	Minutes of the 5 th 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 th Meeting of the informal group on frontal impact	Chairman
4.6	Final minutes of the 4 th 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 th Meeting of the informal group on frontal impact	Chairman
3.12	Draft minutes of the 3 rd 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 rd Meeting of the informal group on frontal impact	Chairman
2.09	Minutes of the 2 nd 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
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 nd Meeting of the informal group on frontal impact	Chairman
1.04	Draft Minutes of the 1 st Meeting of the informal group on frontal impact	Secretary
1.03	Agenda of the 1 st 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

