AFB20 (2) Roadside Safety Design Subcommittee on International Research Activities 2013 EUROPEAN Meeting Minutes

Mike Dreznes called the meeting to order at 8:46 AM on Thursday April 11, 2013 in the CEN-CENELEC Management Centre in Brussels, Belgium. Rod Troutbeck sent his apologies that he could not attend the meeting.

Ninety six people attended the meeting.

Christophe Nicodème , Director General of the European Union Road Federation (ERF) welcomed everyone to Brussels. His staff was acknowledged for the excellent job they did to coordinate the meeting.

Mike Dreznes explained the purpose of the AFB20(2) International Research Committee and that the Subcommittee currently has one hundred and fourteen Members, twenty four Corresponding Members and three hundred and thirty eight Friends from thirty eight Countries.

He explained that the attendees at the meeting could request to become Members of AFB20(2) due to their attendance at the Brussels meeting. To remain a Member, Members from outside the USA and Canada are expected to attend a winter, spring or summer meeting once every two years. USA and Canadian Members are expected to attend a winter, spring or summer meeting twice every two years in order to remain a Member.

Corresponding Membership is only by invitation from the co-chairs. Attendance at the meetings by Corresponding Members is strongly encouraged, but not required. This type of membership was created to enable industry experts to have a greater involvement even though their ability to travel is limited. It expands the Subcommittee's ability to meet its stated mission by having a greater involvement of representatives from countries other than North America and Europe.

The membership list is on the Committee's website.

The meeting was opened with a very informative presentation by George Kastarakis (European Commission – DG Enterprise) titled "CE marking conditions for the road safety barriers placed as products on the EU market." This presentation created significant discussion among the attendees.

The meeting was then divided into four Sessions:

SESSION I: EN 1317 Framework – CE Mark and EU Rules for Road Restraint Systems that was chaired by Marco Anghileri,

Chairman: Marco Anghileri CE marking conditions for the road safety barriers placed as p SESSION II: Innovation for Road side Safety that was chaired by Angel Martinez SESSION III: Workzone Safety / Experience with Crashworthy Terminals & Transitions

that was chaired by Franz Muller and

SESSION IV: Forgiving Roadsides according to the EN 12767 / Motorcycle Safety that was chaired by Ali Atahan.

SESSION I: EN 1317 Framework – CE Mark and EU Rules for Road Restraint Systems

The following presentations were made during this session:

1. Revision of the hEN1317-5 – Modifications of the EU Harmonized Standard – Procedural Improvements

Luca Felappi (Arcelor Mittal),

2. Revision of the hEN1317-5 – Modifications of the EU Harmonized Standard – Technical Improvements

Luca Felappi (Arcelor Mittal) and Franz Muller (Road Safety Consultant), ITALY

- 3. Soil and EN 1317: Origin, Development and Proposal
 Matteo Pezzucchi (Norwegian Public Road Authority), NORWAY
- **4.** Effects of Materials Tolerances on the Design of Road Safety Barriers Claudia Cofano (GDTECH), BELGIUM
- **5.** Use of Computational Mechanics Methods Within EN1317 Clément Goubel (LIER), FRANCE

SESSION II: Innovation for Road side Safety that was chaired by Angel Martinez

The following presentations were made during this session:

- **6.** SAVERS (Selection of Appropriate Vehicle Restraint Systems) Project Francesca La Torre (University of Florence), ITALY
- 7. Roadsense, Prevention of Involuntary Lane Departure by Road Audio-Tactile Alert

Jeanne Foret (Aximum), FRANCE

8. Historical Review and Current Situation for Road Restraint Systems in Spain

Sergio Corredor (SIMEPROVI), SPAIN

9. In-situ Concrete and Precast Technology Go Together for the Next Generation of Concrete Barriers

Thomas Edl (DELTA BLOC), AUSTRIA

10. Roadside Safety Evaluation Software for Portugal

Carlos Roque (National Laboratory of Civil Engineering), PORTUGAL

11. Technical Innovation for Safer and Sustainable Steel Safety Barriers – Present and Future.

Christina Rodriguez (GRUPO CONDESA), SPAIN

12. Optimizing Crash Cushion Selection based on Performance, Physical Constraints and Reusability

Luigi Grassia (University of Naples) ITALY

13. *Installation of Steel Guardrails on Bridges - Belgian Developments* Joseph Marra (GDTECH) and Kris Redant (BRRC), BELGIUM

SESSION III: Workzone Safety / Experience with Crashworthy Terminals & Transitions

The following presentations were made during this session:

14. Portable Steel Barriers & Gates

Tobias Schneider (SGGT), GERMANY

15. Temporary Portable Rumble Strips in Work Zones

Tim Cox (Plastic Safety Systems), USA

- 16. Work Zone Safety using the Low Angle (T) Containment Levels of EN 1317 Jan Droege (Volkmann & Rossbach), GERMANY
- **17.** *Towards a pre-normative recommendation for work-zones across Europe* John Kreps (Avery Dennison), BELGIUM
- 18. Evaluation of 12m Long Turned Down End Terminal Using Full Scale Crash Testing and Finite Element Simulation

Ali Osman Atahan (Mustafa Kemal University), TURKEY

- 19. Evolution of Steel to Concrete Transitions from 1974 to EN 1317-7 Heike Becker (Einfeldt & Partner GbR), GERMANY
- 20. The Co-Effect of Vehicle Velocity and Mass on Roadside Design
 Adrian Cotrus (National Transport Infrastructure Company), ISRAEL

SESSION IV: Forgiving Roadsides according to the EN 12767 / Motorcycle Safety The following presentations were made during this session:

21. "Forgiving" Roadsides by Using Passive Safe Road Infrastructure According to EN12767

Carolien Willems (Safety Product), BELGIUM

22. Guidelines for the Approval and Installation of Forgiving Roadside Poles in Israel

Victoria Gitelman (Ran Naor Road Safety Research Centre), ISRAEL

23. Warrants and Standards for Motorcycle Protection at Crash Barriers in Israel

Victoria Gitelman (Ran Naor Road Safety Research Centre) ISRAEL

24. *Trees in Non-Urban Areas and European Road Safety*Myrko Bellmann (Volkmann & Rossbach), GERMANY

The presenters were thanked for their excellent contributions. Copies of all presentations will be available on the Midwest Research website in the near future. The website address is ftp://mwrsf.unl.edu/afb20. The user name is afb20 and the password is afb20. They also will be available on the European Road Federation (ERF) website: www.rrs.erf.be

Carolien Willems from Safety Product in Belgium announced that a live drive demonstration of their Zip Pole would be conducted on Friday, April 12 and all were welcome to attend. The link to download the film of the event can be found at: http://we.tl/4ylgsrIOj9

Mike Dreznes announced that the next formal AFB20(2) Sub-Committee meeting will be conducted in conjunction with the 2013 AFB 20 Summer Workshop that will be held in New Orleans, Louisiana. The AFB-20 meetings will begin on Sunday, July 7 and end on Wednesday, July 10, 2013. The AFB20 (2) Subcommittee Focus Topics will be "Concepts and Products Designed to Reduce the Number of Run Off the Road Impacts" and "To Tree or Not To Tree...That Continues to be the Question." All attendees were encouraged to attend and to make a presentation. Anyone interested in making a presentation on one of the Focus Topics or suggesting a different topic should contact one of the Co-Chairmen as soon as possible.

The attendees agreed that AFB20(2) needed to conduct this meeting in Europe on an annual basis. ERF offered their services to coordinate the meeting in 2014. A few suggestions for locations were offered and it was decided to create an organizing committee chaired by ERF to

determine the time and location for this meeting in 2014. A strong recommendation was made to try to tie the 2014 meeting into Intertraffic Amsterdam.

Mike Dreznes encouraged all attendees to consider joining ERF if they were doing business in Europe and also joining IRF if they were doing business outside of Europe. Dreznes also told the attendees about the IRF World Meeting that will be held in Riyadh, Saudi Arabia from November 9-13, 2013. This meeting is held once every four years and all were strongly encouraged to attend.

ERF was again thanked for their hard work coordinating the meeting as well as providing lunch to all of the attendees. Konstandinos Diamandouros was specifically thanked for his excellent coordinating efforts.

The meeting was adjourned at 6:17 PM.

AFB20 (2) Meeting, 11th April 2013, Brussels Participation List

Surname	Name	Organisation/Company	Country
Alkumru	Ali	Alka Guardrail	Turkey
Almanza	Felipe	Traffix Devices Inc.	UK
Anghileri	Marco	Polytecnico de Milano	Italy
Aslan	Özlem	EUPAVE	Belgium
Ascensao	Goncalo	CEN	Belgium
Artar	Andy	Gregory Industries, Inc.	USA
Atemnkeng	Pascal	ERF	Belgium
Atahan	Ali	Mustafa Kemal University	Turkey
Battistini	Alberto	AB Progettazioni	Italy
Becker	Heike	Einfeldt & Partner	Germany
Bellmann	Myrko	Volkmann & Rossbach	Germany
Bigley	Philip	Trinity Highway Products	USA
Bergendahl	Peter	Trinity Highway Products	Sweden
Bjur	Pål	Saferoad	Norway
Boselli	Lucio	Traffic Devices Inc	UK
Bowyer	Steve	Hill and Smith Ltd	UK
Bullock	Adrian	Highway Care	UK
Cofano	Claudia	GDTECH	Belgium
Coerver	Marcel	Laura Metaal Road Safety	Netherlands
Cotrus	Adrian	Israeli National Transport Infrastructure Company	Israel
Corredor	Sergio	SIMEPROVI	Spain
Cox	Tim	Plastic Safety System	USA
Corsanici	Mauro	Indusrty A.M.S	Italy
de Prado	Alberto	CIDAUT	Spain
Derin	Erman	ÇİMSA Company	Turkey

Diamandouros	Konstandinos	Euopean Union Road Federation	Belgium
Diez	José	Euopean Union Road Federation	Belgium
Dreznes	Mike	International Road Federation	USA
Droege	Jan	Volkmann & Rossbach	Germany
Dyke	Gerrit	Linsday Transportation Solutions	USA
Duncker	Ben	Highway Care	UK
Edl	Thomas	DELTA BLOC	Austria
Felappi	Luca	CRM Group	Belgium
Foughali	Zoubeida	Industrias Duero	Spain
Foret	Jeanne	Aximum	France
Jach	Marek	PASS + CO Poland	Poland
La Torre	Francesca	University of Florence	Italy
Muller	Franz	Road Safety Consultant	Italy
Ganster	Wolfgang	DELTA BLOC	Austria
Garino	Dario	GDTECH	Belgium
GIACOMETTI	Philippe	TERTU	France
Gitelman	Victoria	Ran Naor Road Safety Research center, Israel	Israel
Goubel	Clement	LIER	France
Grassia	Luigi	Second University of Naples	Italy
Hansen	Terje	SafeRoad	Norway
Harris	Ari	Transpo Israel	Israel
Hiekmann	Heinz Georg	PASS + CO	Germany
Impero	Pasquale	Indusrty A.M.S	Italy
Ivanov	Nikolay	BBARS	Bulgaria
Ivanova	Ani	BBARS	Bulgaria
Janssens	Bart	Agency for Roads and Traffic, Flanders	Belgium
Janssen	Guy	GDTECH	Belgium
Katsarakis	George	European Commission	Belgium
Klein	Walter	SGGT	Germany
KONOMI	Ujiyasu Ken	PMR Japan, Inc	Japan
Kwint	Huib	Rijkswaterstaat	Netherlands
Kwaskiak	Karol	ArcelorMittal	Poland
LeFante	John	DBI	UK
Lorenzi	Giuliano	Autostrada Pedemontana Lombarda	Italy
Marozzi	Chiara	CRM Group	Belgium
Marra	Joseph	GDTECH	Belgium
Mauer	Rick	Gregory Industries, Inc.	USA
Marolda	Maria-Cristina	European Commission	Belgium
Martinez	Angel	Road Safety Consultant	Spain
Mazzocchi	Alain	Provincia di Bergamo	Italy
	Bev	Britpave Barrier Systems Ltd	UK
McMenemy Metushi	Sonila	ERF	
Miller	Jan		Belgium
Montesinos	Fernando	Traffix Devices	USA
ivioritesinos	геннанио	Industrias Duero	Spain

	Michael	Posts of Tankardana	1 5 .
Novikov		Protect Technology	Russia
Pezzucchi	Matteo	Norwegian Public Roads Administration	Norway
Pirani	Nicola	Provincia di Bergamo	Italy
Powel	Steve	Highway Care	UK
Ramos	Arturo	Mieres Tubos – Grupo Condesa	
Naiiius	Barroso		Spain
Redant	Kris	Belgian Road Research Centre	Belgium
Riccobono	Davide	Snoline	Italy
Rigah	Frédérique	SETRA	France
Rodriguez	Cristina	Mieres Tubos – Grupo Condesa	Spain
Rodriguez Medal	Jaime	OFICEMEN	Spain
Roque	Carlos	Laboratório Nacional de Engenharia Civil	Portugal
Sanchis	Sandra	Industrias Duero	Spain
Redlberger	Mathias	REBLOC	Austria
Rus	Vasile	BETAK SA	Romania
SANGÖ	Fredrik	Birsta	Sweden
Schliesing	Axel	SafeRoad	Germany
Schneider	Tobias	SGGT	Germany
Sugihara	Eli	Britpave Barrier Systems Ltd	UK
Thompson	Jeff	Linsday Transportation Solutions	USA
Urlberger	Karl	SPS-Schutzplanken	Germany
Willems	Caroline	Safety Product	Belgium
Williams	Gavin	TRL	UK
Vandenhoeke	Kim	CORPO	Belgium
Verstappen	Hans	Laura Metaal Road Safety	Netherlands
Zaidi	Zaier	National Highway Authority, Pakistan	Pakistan