

**Draft Minutes of the UNECE gtr for Tyres Ad-Hoc Working
Group Meeting
February 5, 2010 (9:30 – 17:30)
Geneva**

1. Welcome and organisational matters

Mr. Ian Yarnold, Chairman, opened the meeting and welcomed all the participants.

2. Approval of the Agenda

The agenda rev. 1 was approved and can be found in **annex 1**.
Two documents from India (GRRF 67-19) and China (GRRF 67-26) will be considered under item 6.

3. Outcome of the November 2009 WP29 meeting.

The Chairman informed the meeting that the technical sponsor France, himself and some key contracting parties met informally and worked on the way forward for the gtr so as to deliver something worthwhile for the considerable effort invested so far. The decision was to proceed in a two step approach: first is to have the harmonized high speed test for PC tyres and to incorporate the FMVSS139 provisions for LT tyres and R54 provisions for C tyres in order to fit to the scope of the gtr which includes vehicles up to 10000 pounds. This 1st phase could be finalized at the beginning of 2012. Mr. Yarnold expected to present a proposal for the time line at the next AC.3. The second phase will contain fully harmonized tests for PC and LT/C tyres. According to the tyre industry (TI), 2 to 3 years are needed to complete the task. This should be presented as an indicative time line. This second phase is significant in terms of resources and cost, and so the end of the second phase should be presented with sufficient flexibility to avoid missing deadlines. AC.3 would indicate if this proposal is reasonable.

4. Forward Plan for GTR Marking by special committee of AC.3.

The Chairman indicated that the marking issues for GTR's is quite challenging and goes far wider than the tyre issue. The problem is that the proposal of the tyre WG does not fit well within the framework of the 1998 Agreement as there is no mutual recognition obligation between CPs under this agreement. The meeting accepted that a more generic approach would be needed and that the marking issue is somewhat outside of the gtr. It will be up to AC.3 to have a strategic view on how marking should be dealt with the 1998 Agreement.

The Chairman is hoping that there will be a fruitful discussion on this issue and urged the CPs to discuss with their representatives who attend AC.3 to try and convince them to get involved with this very important task.

ETRTO confirmed that the marking is an important issue which has a huge impact on cost and remains one of the objectives of the TI with high expectations.

OICA underlined that there are 2 kinds of markings: one technical and one administrative. The first is already almost addressed and harmonized in the gtr. The second one is much more difficult, but they are currently working on a proposal.

RMA underlined that in terms of market share, replacement tyres are the most important part and any marking solution should also address these products.

The GRRF secretary indicated that the EC have already worked on marking provisions for the glazing gtr (document GRSG/2007/32). He agreed that the technical marking could be harmonized reasonably easily but the administrative element is probably more difficult. He also reminded the group of the possibilities within the 1998 agreement and mentioned that even though a global marking agreement could be reached CPs are under no obligation to accept it.

The Chairman indicated that although GRRF has the technical expertise, marking is a legal issue. Therefore the challenge is to form a group which has the correct expertise to find a marking solution suitable for use in all gtrs. The expectation of the Chairman is for the marking work to be incorporated into a special resolution which can be used by other gtrs although he acknowledged that it may take a significant amount of time.

China supported a harmonized gtr marking and indicated that both the tyre industry and the government are prepared to participate in such work with a view to produce a draft marking proposal as soon as possible as it will take time to review the proposal.

5. Discussion of the draft tyre gtr (phase 1) document – ref.TYREgtr-08-02

The following items were reviewed for amendment:

- Page 3, Section 1, item 4, Requirements: section to include provisions for noise, bead unseating, and plunger energy.

Rationale: The proposed structure of the document is to have one section for all the common tests that apply to all tyres and a subsequent section for the tests which only apply to one specific product. This is not related to the module content indicating which test is mandatory or optional. Those tests being unique are therefore harmonized by themselves and related to both PC tyres and LT/C tyres should therefore move to section one.

Comments:

Chair indicated that the module content will need to be incorporated in the document.

US expressed a concern with having noise requirements for all tyres.

EC explained that rolling resistance will need to be included when the technical requirements are agreed.

- Page 7, Section 3, Definitions, reference of C1 and C2 to R.E.3 vehicle classifications: M1, M2, N1, N2, O1, O2, etc.

Industry proposed to refer to Special Resolution 1.

Comments:

CAN: agreed but proposed not to repeat the definitions but just to make reference to SR1 (similar to gtr 3).

Secretariat agreed with Canada concerning C1 and C2 definition and alignment with SR1.

- Page 7, Section 3, Definitions:

Industry suggested that there is a need to include a definition for C3 tyres based on US LT tyres with LI greater than 121 and to incorporate noise limits for C3.

Rationale:

In FMVSS139, the category of LT tyres includes tyres up to load range E which means tyres with a load index of at least 128 and maybe higher when, in Reg.54, C tyres are generally limited to LI up to 121. So there are tyres with a LI greater than 121 and up to 128 which are true LT tyres and are included in FMVSS139. The proposal is not to include all C3 tyres but only a subset.

Comments:

EC: agreed if needed.

RF agreed as well.

- Page12, Section 3, Definitions, there are two definitions for “tyre size designation” listed. Which should we keep?

Industry proposed to use the second, as it is more generic.

Rationale: the first definition is not applicable for all tyre sizes. This is a conventional format for metric tyres but not all size designation starts with section width, aspect ratio and rim diameter. The 35x12.50R15LT for instance would not fit to the first definition: 35= outside diam. in inch, 12.50=section width in inches, R=radial; 15=rim diameter in inches and LT= light truck. It was considered that the second definition would generally be more applicable worldwide. Furthermore, annex 5 of Reg. 54 lists examples of tyres that do not follow the normal dimensioning

nomenclature. However, annex 5 is not an exemption list, but identifies the dimensional requirements of tyres which do not follow the nomenclature described in the regulation. Nonetheless, these tyres have to follow the regulation and meet all other technical requirements.

Comments:

CPs also agreed on the second definition because detailed definitions on section width, outside diameter, overall diameter and aspect ratio are already contained in the definition section of the Regulation. The definition of the conventional number D that indicates the rim diameter should be added to the list of definitions. Reference to Industry Standards may also be needed to ensure that the tyre size designation can be assigned correctly.

Decision:

The Chairman proposed to return to this issue for further discussion during the next meeting. CPs agreed that applicable provisions are required for all size indications to be displayed on the tyre sidewall including tyres where the tyre size designations do not follow the normal nomenclature. However, we have not yet resolved how we will achieve this without potentially allowing unusual markings to be generated. A solution may be to refer to industrial standards which is a similar approach to that used in the US.

- Page 14, item 4.2 Marking, do we need to add a “G” mark as a place holder for the future global mark?

TI proposes to add a paragraph to read: “Tyres that fully meet the requirements of the gtr are eligible to carry the Global Tyre pictogram shown below. *[For now “G” is shown just as a sample.]*

G

Decision:

To leave it here in square brackets waiting decision from AC.3.

- Page 16, item 4.2.2.13,

TI proposed to consider replacing table with ISO TR 29846.

Rationale:

The table contained in the draft gtr has been copied from UNECE Reg. 54. This table is a relationship table between pressure units; i.e. bar, kPa and psi used for tyre labelling and testing. However, the suitability of the ISO table is considered more appropriate than the current Reg. 54 table.

Decision: This proposal was agreed and the ISO table will be included as an appendix.

- Page 14, Paragraph 4.2.2.5 reference to 4.2.1.9 requires confirmation.

- Page 14, Paragraph 4.2.2.9

China requested additional an option for the marking of reinforced, extra load or light load tyres using Chinese characters.

Rationale:

Although the marking convention is well understood, Chinese characters are fundamentally different from Latin characters and from a consumer perspective long words are difficult to recall and an abbreviated mark would be preferable.

Decision:

The Chairman suggested using XL for reinforced and extra load, LL for light load. The TI will investigate the proposal and report at the next meeting.

- Page 16, item 4.2.2.15, regarding reference to “Appendix 3”, use tables from R 54 § 2.17.2.3.1 as the actual tables in “appendix 3”.

Decision:

To leave this point pending: need to be checked by CPs that do not use R54.

- Page 20, item 4.4.5.3 figure 1: drawing of normal tyre..., replace with new updated illustration.

Decision

Agreed. TI will make a proposal.

- Page 20, §4.4.5.4:

China proposed to add the “Chinese standardization body” to the list.

Decision:

Agreement to add references to the Chinese and Indian standardization bodies and to add abbreviations to all those referenced in the list.

- Page 21, Section 4.5.1,

TI proposed to delete note regarding ASTM standard.

Rationale:

RMA has petitioned NHTSA to update FMVSS 109 strength test to reflect the ASTM updated standard.

Decision:

Agreed. NHTSA is evaluating the RMA request. Answer before end 2010.

China: requests to amend table in §4.5.1. Included in RMA petition?

- Page 22, Section 4.5.6, while the requirements of this paragraph are not reflected in FMVSS 109, industry has petitioned NHTSA to update this standard to reflect the ASTM update (ASTM F 414-09).

US: same as above.

- Page 22, § 4.5.6:

Request from China for additional 4 paragraphs (4.5.6 to 4.5.8 and 4.5.10).
See inf. doc. GRRF 67-26.

Rationale:

The purpose of strength test is to determine the energy for breaking a tyre. The overall strength of a tyre is limited to the weakest point where the breaking energy is the smallest. If we use the average breaking energy to indicate the strength of a tyre, the weak points of the tyre may be ignored, although it may be impossible to find the weakest point of the tyre by measuring the breaking energy at only 5 points. However, it is a proper philosophy to indicate the strength of a tyre by the smallest breaking energy value instead of the average value. From the point of view of test, it will also simplify the practice. Therefore, the tested tyre shall be assessed to fail to meet the strength requirement if the breaking energy at one of the 5 points is less than the minimum value specified in the table in paragraph 4.5.1.

Decision:

To keep the question open and to revisit the text when US have completed the review of the test method.

- Page 23, Section 4.6.2,

Preparation of tyre, information in this section is from ASTM F 2663-07, and industry has asked NHTSA to consider updates to FMVSS 109 to reflect these improvements.

Decision:

Wait for update of US.

- Pages 27 and 28: Bead unseating test, need to improve pictures.

- Page 29, Section 4.7.3.1,

TI asked if the US and Canada would be ok with use of either the 2.0 or the 1.7 m drum for endurance test.

Chair: Given that the endurance is preliminary a US based test, it will be difficult to introduce a new drum test diameter unless we can define a correlation factor that the US agrees to. If we leave the 1.7m diameter as the requirement, the TI, most probably, in house per factory, must have a way to correlate a 2.0m drum with a 1.7m drum for performance purposes. Could TI live with 1.7m drum?

TI could agree on the proposal to have the document indicating only the 1.7 m drum for the tests that, today, are in FMVSS139. TI would prefer to keep the flexibility regarding correction factors for high speed test as per UNECE Reg. 30 which will preserve the requirements of today.

Decision:

Agreement to keep 1.7m drum for this specific endurance test as currently apply in FMVSS 139. The high speed test for which both diameters 1.7 and 2.0 m are permitted in UNECE Reg.30, further discussions are needed but at the next meeting.

Page 30, statement in red, italics, is to be deleted, and include the first paragraph (non-strike through) as well as the strike through - Agreed.

- Page 31, Section 4.8.3.2, is the US and Canada, ok with use of either the 2.0 or the 1.7 m drum?
Same as page 29.
UK: This test is included in the core module and therefore mandatory which will affect UNECE countries as well.
Chair: Request to have 1.7m as basis but technical capability should be assessed. Need further assessment.
TI: accept 1.7m and see if a correlation factor could be developed with the 2.0m. To be rechecked with concerned CP. Point for the next meeting.
- Page 31, Section 4.8.3.3, need to clarify the wording “maximum load carrying capacity”. Better to use “maximum load rating” - Agreed.
- Page 32, Section 4.9.1.3, this paragraph not necessary in regards to modern radial tyres.

Agree to keep the point in the text with six hours in square brackets: a shorter time could be adopted based on experience.

The proposal to add a § 4.9.1.4 with the following sentence saying that: “If a method other than that describe in § 4.9.1.3 above used, its equivalence must be demonstrated” was considered a reasonable proposal.

Action Item: TI to come with a proposal at next meeting.

- Page 33, Section 4.9.3.1, is the US and Canada, ok with use of either the 2.0 or the 1.7 m drum?
Same as page 29.
- § 4.9.3.7: speed symbol P - Inf. Document from China (GRRF 67-26).

Chair: This issue was already addressed during the development of the harmonized test method. A tyre that would not meet this requirement could not be sold in US and could not be a global tyre.

It would be very challenging to establish requirements that are below existing requirements in one part of the world.

The same concern was expressed by India, but after some investigation it was clear that those tyres were belonging to LT category of tyres.

- Page 35, Section 4.10.1, delete “3.1.19” and replace with “3”.
Agreed.

- Page 36, Section 4.10.1, do we need to add C2 limits to the existing table?

Agreed for C2 as well as for C3 tyres.
The table being for stage 1 there was an agreement to keep on hold consideration on stage 2 but to take note.

- Page 39, Section 4.10.6.4.3, should criteria for category “C3” tyres be addressed?
Agreed to include C3.

- Page 40, Section 4.10.6.5.1, if the strike-through portion is deleted, and then certain TRA tyres greater than 121 LI will not be addressed. Should criteria for category “C3” tyres be addressed?

Agreed to take off strike-through but cross references need to be rechecked.

- Page 40, Section 4.10.6.5.3, problems if Class C3 deleted??
Same as above.

- Page 41, Section 4.10.6.6.3 (b), do not delete “From 60 to 80 km/h for Class C3 tyres?”
Same as above.

- Page 42, Section 4.10.6.8 (b), do not delete “70 km/h for Class C3 tyres”?
Same as above.

- Page 47, Section 4.11.3, the scope refers to Special Resolution 1, whereas the regulations, such as R117, refer to the old vehicle classification. Documents should be coherent - Agreed.

- Page 51, § 4.11.3.2.1 M1 reference should be category 1.1 (???) reference.

- Page 60, Appendix 3, nominal rim diameter code table, replace with table from Regulation 54 (2.17.1.3.1), including “.5” values.

Rationale: the table from R54 is more complete - Agreed.

- High speed performance test: proposal to add a table 2 on inflation pressure and test load as § F in the inf. Doc. (GRRF 67-26) from China will be considered by TI.

6. Review comments from Contracting Parties: were included in item 5 above.

7. Roadmap for tyre GTR development: see **annex 2** of the minutes.

1) First phase approval and presentation for AC.3: the proposal was adopted and will be presented by the Chairman at the next March WP.29.

2) Proposal on what should be done as the next step - Harmonisation of LT / C tyres. The proposal was agreed and will be proposed to WP29 for adoption.

8. Any other business

No other business was introduced.

9. Action items

Summary

- Page 6: categorisation should be category 1, category 2
- Page 7: C3 reference
- Page 11: solve tyre size designation. Agree with the short sentence. Details to be incorporated in the definition section. Rim diameter to be included in definition.
- Page 13, marking. Wait for WP.29 for clarification.
- Page 16, take ISO reference and put it in annex of the document.
- Page 14, § 4.2.2.5 check reference
- Page 15, simplified marking for extra load, reinforce and light load: proposal from TI.
- Page 16, § 4.2.2.15 Appendix 3 to be replaced by the one of R54
- Page 20, new diagram
- Page 20: add Chinese and Indian organizations and add the abbreviations of all names
- Page 21, table 4.5.1 must be corrected.
- Page 29, § 4.7.3.1 test drum diameter agreed on 1.7m
- Page 31 § 4.8.3.2 test drum diameter agreed on 1.7m
- Page 32, § 4.9.1.3 proposal from TI needed.
- Page 36, § 4.10.1 C2, C3 to be added
- Page 33: Question from China low category of tyre: ETRTO to check with China.
- Page 47, M1 definition to be replaced by SR1 definition.
- Page 51 § 4.11.3.2., M1 definition to be replaced by SR1 definition.
- Page 60, replace with the table of R54.

10. Close of the meeting

The Chairman suggested sending a note to AC.3 from all CPs that want to sponsor the introduction of rolling resistance test requirements in the gtr in order to have clarity and transparency at the highest level.

The next meeting will be in September together with the GRRF meeting.

Maybe another interim meeting will be necessary but exchange by mail could be done to monitor the progress of the draft.

A justification document has to accompany the technical document and we have to start working on it as soon as possible. The Chairman wants to keep it very succinct because the tests already exist.

The Chairman closed the meeting and thanked all the participants for their contributions during the discussion.

**Draft Agenda for UNECE gtr for Tyres Ad-Hoc Working
Group Meeting
February 5, 2010 (9:30 – 17:30)
Geneva**

1. Welcome and organisational matters
2. Approval of the Agenda
3. Outcome of the November 2009 WP29 meeting – Ian Yarnold
4. Forward Plan for GTR Mark by special committee of AC.3 – Ian Yarnold
5. Present the content of the gtr first phase – Tyre industry

Ref: 10 Dec draft as posted in UN-ECE GTR-Tyre website:
www.unece.org/trans/main/wp29/wp29wgs/wp29grrf/grrf-inf tyre8.html

6. Review comments from Contracting Parties
7. Roadmap for tyre GTR development
 - 1) First phase approval and presentation for AC3
 - 2) Proposals on what should be done next step
 - Harmonisation of LT / C tyres – Tyre industry
8. Any other business
9. Action items
10. Close of the meeting

Roadmap

Global Technical Regulation for
Tyres

Phases 1 and 2

Definitions

- Phase 1:
 - Complete harmonized requirements for radial passenger car tyres
 - For radial LT/C tyres, reference will be made to existing (non-harmonized) regulations
- Phase 2
 - Complete harmonized requirements for radial tyres destined for vehicles up to 4536 kg

GTR for Tyres Roadmap


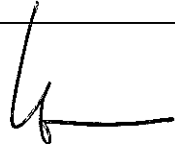

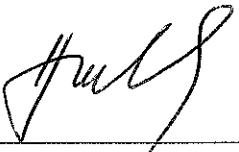
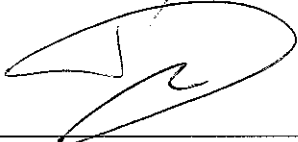
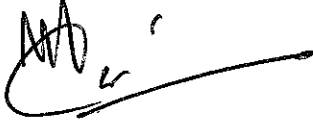

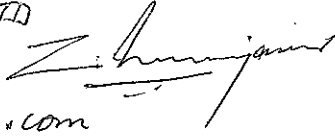


Phase 1: Harmonized requirements for radial PC, non-harmonized requirements for radial LT/C tyres	Q4 2009	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	2012	2013	2014	
Meeting with some CPs, Technical sponsor, Chairman of ad hoc WG at WP29													
Publication of draft GTR text													
Meeting of ad hoc WG after GRRF; validation of Roadmap													
Take into account CP reactions to GTR text													
Adoption of draft GTR text with harmonised PC tests by GRRF													
Presentation of final draft GTR text (PC only) to WP.29													
Adoption of GTR text (Phase 1) by WP.29										Q1			
Adoption by UN in New York										Q2			
Phase 2: Harmonized requirements for all radial tyres for vehicles up to 4536 kg													
Tyre Industry works on LT/C test harmonisation (* = meetings of ad hoc tyre GTR WG, where work will be shared)			*									Q1, Q2	
Presentation of proposal for validation by CPs											Q3		
Take into account CP reactions to LT/C harmonisation proposal											Q3, Q4	Q1, Q2	
Adoption of draft GTR (PC and LT/C) by GRRF												Q3	
Adoption of complete GTR (PC and LT/C) by WP29												Q4	
General													
AC.3 works on "administrative marking" issue for GTRs in general Action plan to be defined by WP.29 AC3													

Today

Today + 4.5 years

INFORMAL WG ON TYRE GTR
Geneva, 5 February 2010

ATTENDANCE LIST

Name	Country / Company	Signature
DALE FREYGANG	USA Goodyear	
Kai-N. Krüger	Germany Continental	
ANGELA WOLINSKI	USA MICHELIN [RMA]	
PETR HUSTAK	MINISTRY OF TRANSPORT HUSTAK@IGTT.CZ	
Dominique LESAIL	FRANCE / UTAC	
M K Jain	Apollo Tyres INDIA	
A. AKBAR BADUSHA	ARAI, INDIA badusha.shl@ araiindia.com	
Z.A. MUJAWAR	MAHINDRA & MAHINDRA LTD INDIA mujawar.zia@mahindra.com	
Hans Hesse	Germany BMVBS hans.hesse@bmvbs.bund.de	
Zhao WANG	wangzhao.sc@gmail.com P.R.CHINA	

/CATARC

INFORMAL WG ON TYRE GTR
Geneva, 5 February 2010

ATTENDANCE LIST

Name	Country / Company	Signature
IAN KNOWLES	EUROPEAN COMMISSION ian.knowles@ec.europa.eu	
EZANA WONDIMNEH	USDOT INT. HARMON. & POLICY	EW
STEPHEN SOPP	UK DfT Steve.sopp@dt.gsi.gov.uk	
LAWRENCE THATCHER	DEPT. FOR TRANSPORT UK Lawrence.thatcher@dt.gsi.gov.uk	
Kurt Pfister	Switzerland Federal Road Office	
Jan Stokvel	The Netherlands RDW	
José M ^{ns} López	INSIA (Spain)	
Andrei Bucharov	RUSSIAN FEDERATION ab@sartfond.ru	
Alexey Prokofiev	RUSSIAN FEDERATION	
MIROSLAV ŠKULEC	SLOVAK REPUBLIC	VK

INFORMAL WG ON TYRE GTR
Geneva, 5 February 2010

ATTENDANCE LIST

Name	Country / Company	Signature
MICROSLAW DABROLOVIC	TAT - POLAND	
Takakazu Fukuoka	OICA (Toyota) takakazu.fukuoka@toyota-europe.com	
Yutaka SAWADA	OICA (JAMA) tce@jama-e.be	ys.
Damien AMHEUX	OICA (Renault) damien.amheux@renault.com	
Kai Fredenk ZASTROW	OICA (PSA) kai.zastrow@mps.com	
Olivier FONTAINE	OICA (Secretariat) fontaine@oica.net	
MAURIZIO PARCA	ETRTO (BRIDGESTONE) MAURIZIO.PARCA@BRIDGESTONE.EU	
Pascal GUILLAUME	ETRTO (GOODYEAR) pascal.guillaume@goodyear.com	
TIM ROBINSON	RMA (BRIDGESTONE) ROBINSONTIM@RFUSA.COM	
Doris Ackermann	OICA (GME) doris.ackermann@de.opel.com	

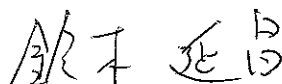

INFORMAL WG ON TYRE GTR
Geneva, 5 February 2010

ATTENDANCE LIST

Name	Country / Company	Signature
Liuyan Rong	Liuyanrong@catarc.ac.cn (china)	刘彦戎
Jian Jun Zhang	Hangzhou zhongce Rubber CO., LTD china ZJJ 86040925@sohu.com	张建军
DENIS BRAULT	CANADA TRANSPORT CANADA denis.brault@tc.gc.ca	D. Brault
GEOFFREY PITT	AUSTRALIA Department of Infrastructure, Transport, Regional Development & Local Government. geoffrey.pitt@infrastructure.gov.au	G. Pitt
NOIRKONNE Jean- Claude	ETRTO info@etrto.org	J. Noirkonne
Koichi Fujimura	ETRTO (JATMA)	K. Fujimura
Steven Butcher	RMA	S. Butcher
Marc SPINETTO	ETRTO	M. Spinetto
KEITH HODGES	ETRTO	K. Hodges
Hidenobu Kubota	Jasic / Japan	久保田 啓博

INFORMAL WG ON TYRE GTR
Geneva, 5 February 2010

ATTENDANCE LIST

Name	Country / Company	Signature
Nobuatsu Suzuki	Japan/mlit	
Hiroyuki NONAKA	JAPAN/JASIC (JATMA-BRIDGESTONE)	
YARNOLD Tan	UK.	