

Draft Minutes for UNECE gtr for Tyres Ad-Hoc Working Group Meeting February 4th, 2008 in Geneva

1. Welcome and organisational matters

The GRRF ad-hoc working group met on 4 February 2008 to resume discussions on the development of a gtr on tyres (TYREgtr) under the Chairmanship of Mr. Yarnold. He welcomed all the participants to this 4th session of the Ad-hoc WG.

Attendance: see attachment 1.

2. Approval of Agenda

The agenda was adopted as shown in attachment 2.

3. Approval of Draft minutes from last meeting, 28 September 2007

The report of the last meeting was adopted as posted on the UNECE Web site (ref. TYREgtr-04-09).

4. Discussion of Scope of gtr for Tyres (PC and / or LT tyres)

At the last meeting the following text was considered and Contracting Parties (CP) were requested to confirm this proposal with their delegate in AC3:

Proposal for gtr scope, made during the GRRF ad hoc tyre gtr meeting, 28 September 2007. (Ref. TYREgtr-04-08)

*This Regulation covers new [radial] pneumatic tyres designed primarily for vehicles in category 1-1 [1-2 and 2, all with a mass limit of 4,536 kg].**

**As defined in the Special Resolution Number 1*

This regulation defines requirements for tyres as a separate component [technical unit] [item of motor vehicle equipment]. It does not limit the installation on any categories of vehicles.

In order to clarify the tests under Reg. 30, 54 and FMVSS 119, 139 that would have to be considered under this scope, the expert of RMA presented two draft slides. The first showed significant regulations for bias and radial, passenger, light truck and commercial tyres. The second gave an assessment of gtr progress by tyre classification. See attachment 3.

At that time of discussion, the Chairman addressed the following questions to the CP about the scope:

Do we consider radial tyres only?

How do we deal with the question of PC and LT tyres?

Comments:

The delegate from India reminded the group that there are still a lot of bias tyres in their country and therefore requested that bias tyres be included in the scope of the gtr. He suggested that the Scope of the GTR must clearly define "Category" of tyres and not necessarily vehicles because the testing norms pertain to types of the tyre/application.

The Chairman stated that both UNECE 1958 and 1998 Agreements define regulations according to vehicle categories and it seemed logical to follow this approach in the GTR and it seemed logical to follow this approach in this GTR.

The expert of Netherland said that, considering the time line, only PC tyres should be considered.

The expert of USA understood why passenger car tyres have to be considered within the gtr. However, he also pointed out that, in the US, passenger car tyres (P-metric) are fitted not only on passenger cars, but also multipurpose vehicles such as SUVs, larger (e.g, 18 passenger) vans, and light trucks. Therefore, such SUVs, vans and light trucks can also be fitted with LT tyres (e.g., LT tyres through load range E). Within the US regulation (FMVSS139), both P-metric and LT-metric tyres are addressed. He suggested that all vehicles below 4536 kgs should also be covered by the scope, but in an effort to overcome the huge task of harmonising LT tyres with Reg. 54, he suggested that perhaps existing tests could be used alleviating the need for total harmonisation.

The delegate from the EC reminded the group that with gtr's in general, we try to look for the low hanging fruit and he considered it may be more appropriate, as step one, to start only with PC radial tyres which make up a large proportion of the world tyre market.

The Chairman underlined the need to come with a robust proposal for AC3 and considered that the text proposed during the last meeting (Doc. TYREgtr-04-08) looked reasonable and was the closest to what the Contracting Parties (CP) could agree upon.

The experts of USA and EC supported this proposal as a way to go forward.

In order to try and facilitate a solution the expert of UK asked about the percentage of LT tyres compared to PC tyres and mentioned that, within Reg. 54, there is a load speed test for Q rated tyres and above that appears similar to Reg. 30 test but with slightly different load. He questioned whether it would be feasible to use this test and how it may correlate with FMVSS139 in practice.

The expert of RMA indicated that replacement light truck tyre shipments for use on consumer light trucks accounted for about 11% of shipments of PC and LT tyres. Additionally it was reported that original equipment light truck tyre shipments for use on consumer light trucks accounted for about 4% of shipments of PC and LT tyres.

After the discussion, no compromise solution was reached, but the tyre industry agreed for the next meeting in September, to investigate the possibility of including only LT or C tyres with speed rating of Q and higher (in Reg. 54) or tyres with load range C, D and E (in FMVSS 139), which may limit the amount of harmonisation needed.

As a conclusion, and based on the comments received from the CP's, the Chairman indicated that the proposal seems viable as a policy approach. The tyre industry volunteered to research the possibility of using the high speed test in Reg.54 as an alternative to FMVSS 139. The Chairman thanked the tyre industry for their offer to undertake this extra work. He also asked them whether they would be in a position to prepare an executive summary describing the complexity associated with including light truck (LT or C) tyres in the GTR by April to facilitate communications with AC3.

5. Updates from Task Group Leaders

- **TYRE SIDEWALL MARKINGS** (size designation, service description, tyre identification number, type approval markings, etc.)

See attachment 4.

- a. Working status: The expert of JATMA presented the list of markings proposed to be considered in the gtr. Four markings needed further discussion: max inflation pressure and max load rating, Rayon and Temporary Use Spare tyres.

"Radial" and "Tubeless" marking: the tyre industry recommended that these marks should not be displayed on the sidewall and identification of "Bias" and "Tube Type" should be marked only when needed.

The delegate from India could not agree and stated that "Tyre Sidewall Marking" must also contain "Radial" and "Tubeless" words based on the construction of the tyre. As already emphasised by India, in this part of the world, they are in the transition phase of moving from Bias/cross ply tyres to radial and from Tubetype to Tubeless. Therefore, by default a tyre cannot be a radial/tubeless tyre if the marking on tyre doesn't specify such type. He requested that "Radial" and "Tubeless" remain written on the tyre for the next 5 year period.

The delegate from UK, supported by the delegate from the Netherlands, expressed some doubts that writing tubeless on the tyre sidewall would prevent people from putting tubes in tubeless tyres.

The expert from ETRTO underlined that a gtr should be global and should be valid for the majority of tyres existing in the world that are radial tubeless tyres. A specific mark should exist only for the exceptions which are Bias and Tube Type tyres.

Complementary to the discussion, the expert from RMA explained the risk of using a tube in a tubeless tyre and no tube in a tubetype tyre.

After this clarification, the delegate from India agreed to reconsider their position and report at the next meeting. The Chairman indicated there was general agreement on dropping the words radial and tubeless, but he awaited the position of India.

b. TIN – factory code management:

The discussion with ISO has not taken place so far but further discussions are in progress with NHTSA on the system management.

c. TYRE gtr marking: ideas or proposals. What will it look like in countries where a self certification regime is used.

The delegate from the EC reminded the group that where possible we should always try to reduce the markings on a tyre. However, it will be necessary to have another mark in addition to the GTR mark to show compliance with Reg.30.

The delegate from the UK said that if a tyre is marketed around the world, a gtr mark is needed for the mandatory tests together with additional marks for the module options.

The delegate from the USA agreed that a global mark to replace regional marks should be the concept. He proposed to have a global mark to indicate that the tyre complies with the full package of tests. He suggested also following the work done by the EC within WP29.

The delegate from the Netherlands proposed to have a statement in the regulation to say that the global mark is equivalent to Reg.30.

The delegate from India agreed that the global marking should be valid everywhere.

The delegate from the EC reminded the group that gtr's do not cover the administration provisions in regulations and this will require the need for an additional mark.

The delegate from NL agreed with the EC that there is a need to identify the responsibility of the Authority.

The delegate from the EC proposed, as example, to add a suffix with the country number to the global mark when used by type approval authority and to use a zero or a blank space when self certification is used.

The delegate from NL questioned the need for such a mark. He proposed, as already current practice, to request the tyre manufacturer to provide the necessary test report when needed. He added that, even today, it is sometimes not so easy to get details from the TAA everywhere in the world.

In summary, from the discussion, it became clear that a distinction will need to be made for self-certified and type approved products, since a self-certified product is not acceptable to a country requiring type approval. Also the question of indicating which modules have been tested for should be addressed.

- d. A draft proposal of definitions for the tyre sidewall markings was presented briefly to the CP's. It will be circulated for comments.

- **DIMENSIONS TEST**

- a. Feedback from CP's on the draft proposal from the Tyre Industry was consolidated.

The tyre industry presented a table of comments received from 4 different CPs concerning the proposed text for the physical dimensions test method (see attachment 5). Some relatively minor modifications were proposed to the text, and some oral comments were heard from the delegate from the USA on the following items:

- 1) maximum section width (protective ribs)
- 2) reference to year book about formulas
- 3) temperature range during conditioning

The Chairman indicated that the subject was far enough advanced that updates would no longer be required in future meetings. The tyre industry and NHTSA were requested to resolve the remaining minor questions.

- **HARMONIZED HIGH SPEED TEST**

- a. Working status

The expert of RMA reported on some additional tests performed on T rated tyres to determine which test from R30 and FMVSS139 is more severe (see attachment 6). It was shown that the temperature change from start to the end of test is always higher for the Reg. 30 test at 38°C ambient than with the FMVSS139 test.

Tyre Industry indicated they felt confident to use the FMVSS139 for S rated tyres and below and to use Reg. 30 for T rated tyres and higher.

Comments and questions:

The delegate from the USA reported on some additional test results performed by an independent laboratory on 6 pairs of T rated tyres of size 205/65R15, manufactured world wide, confirming the results from the tyre industry. The tests were performed at 38°C which is the worst case for Reg. 30. The load was according to regulations. The air cavity temperature was measured. No tyre failed. The peak temperature reached was always higher with the Reg.30 than FMVSS139. He concluded that the peak temperature looks to be more important than the duration of the test itself.

The issue seems to be resolved, but must await the official analysis and publication of the data from the US government.

If the data is confirmed, the decision to use the FMVSS test for speed ratings of S and inferior, and the R30 test for speed ratings of T and superior, will be confirmed.

The tyre industry agreed to document all the research and rationale for decisions in a paper to be presented at the next meeting.

b. Speed rating L, M, N and P: clarification.

The subject of tyres with speed ratings of L, M, N and P was discussed, based on an informal document from the delegate from India. These tyres have design speeds of 120, 130, 140 and 150 km/h respectively. As such, they may not pass a high speed test at 160 km/h (the speed of the FMVSS high speed test). Several potential solutions were discussed (exclusion from the gtr, lowered limits for certain tests, special markings to indicate low speed use, etc.) but no decision could be made. The tyre industry was requested to make a proposal at the next meeting.

- **ENDURANCE/LOW PRESSURE TEST**

a. Working status:

No new information was presented.

ASTM has completed its work and within the next months will present their results to NHTSA. The USA expressed openness to consider proposed changes based on the ASTM work. The tyre industry would need to submit a proposal with supporting data directly to NHTSA. The low pressure test might be amended accordingly.

b. Low pressure test: Speed rating L, M and N vs UNECE Reg. 54.
See § b. under High Speed Test.

c. Impact assessment on non-USA product lines (snow and ice tyres)
Not discussed.

- **PLUNGER ENERGY (Breaking Energy) and BEAD UNSEATING TEST**

The expert of RMA indicated that ASTM in the USA has nearly completed proposals for modifications to these tests. NHTSA encouraged the tyre industry to make proposals directly to NHTSA, so that any modifications could be considered for the gtr. The same reasoning applies to the endurance and low pressure test procedures.

6. Request for an impact assessment on the TYRE gtr.

The expert of ETRTO informed the ad-hoc working group that it was working on an impact assessment of the gtr, now that several key points in terms of testing requirements have been fairly clearly defined. The tyre industry will attempt to identify and quantify all the costs and benefits of the future tyre gtr. The Chairman thanked the industry for this well-timed initiative. A progress report will be made at the September meeting.

The delegate from the USA recommended focusing the impact assessment not only on the cost but also on the consequences for the tyre itself (better tyres).

7. Timetable and action plan

The project is proceeding according to the time schedule presented at the start.

If the scope is limited to PC radial tyres, the work on the harmonisation will be completed in 2009. However, if a decision is taken to include LT and C tyres, depending on the results of the research to use the high speed test in Reg.54 a delay of up to 3 years may be incurred. The Chairman indicated that he will seek the advice of AC3.

8. Next steps

Work has to carry on in the different groups.

- Dimension test: specific questions from the delegate from the USA have to be addressed.
- High Speed test is largely completed. The NHTSA test results have to be analysed and published.
- Marking: by end of April, proposal from the Tyre Industry for a global gtr mark. Comments from CP expected in time for a possible agreement by end of June.
- The drafting committee of the tyre industry to prepare a first draft of the gtr and of the impact assessment. The 2 documents to be sent as informal document for next meeting in September. To be added in the agenda of the next GRRF meeting. Support from CP was welcomed.
- Endurance and Low Pressure tests: RMA and NHTSA to come with an informal document by next GRRF.
- Plunger and Bead Unseating: RMA and NHTSA to come with an informal document by next GRRF.
- European Commission to work on module 2 including Noise (and possibly Rolling Resistance as a mid term requirement).
- For Wet breaking: test exists in Reg. 117 but describing the rationale on why it was included in the core requirements should be done. How to conciliate the gtr and UTQG?

9. Any other business: nothing to report.

10. Close of meeting

Next session of the ad-Hoc working group on gtr will be in September 2008. The Chairman thanked all the participants for their contribution during the discussion.