

**UN ECE Informal Working Group Meeting on gtr for Tyres
5 February 2007, Geneva**

Draft report

1. Opening of the meeting and organisational matters

Mr. Yarnold welcomed the participants.

2. Approval of agenda

The agenda was approved as shown in working document TYREgtr 02-09.

3. Approval of draft report from last meeting, September 21-22, 2006

The report of the last meeting was approved as circulated.

4. Confirmation of scope of gtr for tyres

According to the EC representative, their proposal for a scope of the gtr would be based on UNECE Reg. 30 with an upper boundary at 5000 kgs but confirmed that he is not yet ready to finalize the definition of this scope.

The US representative said he would also agree on this limit which is close to the existing limit at 10000 pounds in the US regulation although this would exclude some tyres like LT tyres. He underlined that FMVSS 139 does not refer to a type of tyre but simply to new pneumatic tyres for use on motor vehicles with a GVWR of 10,000 pounds or less. And the UNECE Reg. 30 is also similar and applies to new pneumatic tyres designed primarily but not only for vehicle category x, y and z. Neither regulation refers to passenger car tyres directly.

As indicated in the previous meeting report (TYREgtr-02-01, §7), the preferred way of the tyre industry is to start with tyres defined within the tyre industry internationally recognized standards as passenger car tyres; meaning the ones which are approved under UNECE Reg. 30 (sometime referred to as euro-metric tyres). This would include P-metric tyres (as listed in the T&RA standards). Other category of tyres called LT tyres considered under FMVSS 139, are also type approved under UNECE Reg. 54 in addition to the C-type tyres (defined in ETRTO standards). For the Contracting Parties (CP's) signatory to the 1958 Agreement, via the UNECE Reg. 30 and UNECE Reg. 54, there is a clear distinction between both categories of tyres.

The OICA representative underlined that a scope limited to passenger car tyres would not fit to vehicle category 1-1 of Special Resolution 1.

The German representative suggested and supported the idea to have no boundary on the vehicle weight in the definition of the scope saying that the performance of the tyre itself should simply be suitable to the vehicle on which it is fitted.

At the end of the discussion, and without any agreement being reached it was suggested to leave the definition of the scope as it was recorded in the minutes of the last report. All attendees were kindly requested to review the different comments expressed during the meeting and to consider opportunities for compromise.

5. Update on the Areas of Work by Task Group Leaders

- **Tyre Sidewall Markings (size designation, service description, tyre identification number, type approval markings, etc.)**

Representative of JATMA reviewed the activities of the sub-group since the last meeting. He presented a comparison table with existing requirement for marking and identified some area for harmonization. A road map with the different activities and milestones was also presented. See working paper TYREgtr 02-07 and 08 Rev.1 for details.

Comments:

Some of the CP's agreed that harmonizing the sidewall markings is a challenging area.

Two possibilities of simplification based on the fact that most of the passenger car tyres are Radial and Tubeless were discussed:

1. Removal of Radial marking and use of the bias marking only when necessary.
2. Removal of the Tubeless marking and use of the Tube Type marking only when necessary.

The EC representative would not be opposed to exclude Bias tyres from the gtr. Local regulations or UNECE Reg. 30 could be maintained to consider the approval of those tyres. The proposal was also supported by the representative of NL.

Other CPs did not have a clear position on this proposal or expressed some concerns about the indirect encouragement to use tubes with Tubeless tyres (the tyre industry indicated that this practice has to be considered a misuse and it is not recommended because it jeopardizes product safety).

The Indian representative supported the idea of maintaining bias tyres inside the scope of the gtr.

To clarify the point, the tyre industry was requested to provide some figures on the market share worldwide between Radial and Bias tyres and Tubeless and Tube tyres.

- **Presentation of TIN (Tyre Identification Number)**

The RMA representative presented in detail the Tyre Identification Number (TIN) as defined by the US Department of Transport (DOT). See details in working document TYREgtr 03-03.

Comments:

The Chairman reflected the views of the CP's that the system is rather complicated. He asked if it would be possible to have a minimum requirement included in the gtr and to transfer additional requirements at the national or regional level.

The US representative underlined that in fact, requirements of FMVSS 139 and UNECE R30 are similar: the missing point is mainly the factory code.

It was agreed by most of the CP's that the approval number according to UNECE R30 would give the same traceability as the TIN if it is agreed to add the factory code to this number.

The US representative reminded that the DOT TIN is not an approval marking. TIN is just an identification system for traceability.

Whether the gtr marking should be an approval number or just identification was debated.

The Tyre Industry is in favour of maintaining the TIN as one of the markings for the gtr.

All CP's were invited to consider the proposal from the EC detailed in document WP29-140-7 (Compatibility between gtr marking and marking according to 1958 Agreement).

- **Dimensions Test**

The ETRTO representative presented in detail a comparison table showing the different existing requirements on dimensional test and explained a possible proposal for harmonization although some points needs further clarifications within the tyre industry. See additional details in working document TYREgtr 02-02 Rev.1 and 03 Rev.1.

Comments:

Two points were subject of additional discussion:

1. Tolerances:

The OICA representative mentioned that the overall diameter tolerance of +/- 4% on both sidewall heights according to UNECE R30 is already a maximum limit today for the wheel arch dimensions.

OICA suggested that they would prefer to restrict the overall diameter to 2.5% which was also supported by BIPAVÉR highlighting the fact that clearance within the wheel arches is critical, and that there may be particular problems with the installation of some tyres especially those which have been retreaded.

The German representative added that the tolerance on the tyre circumference is very important for new electronic system measurements and should be considered in a new gtr.

2. Number of measurements around the circumference:

The ETRTO representative confirmed there is no risk to have 4 measurements instead of 6.

- **Harmonized High Speed Test**

The representative of ETRTO reported on the activities of the sub-group since the last meeting.

At the last meeting 3 different options were discussed. One of the options considered was to use the FVMSS 139 high speed test for tyres with a speed rating equivalent to symbol of "S" and below, and Regulation 30 for speeds above "S". At that meeting there was a general consensus by the CP'S that due to the limited time scale this proposal could be considered as a starting point, but it would require significant further work (ref. TYREgtr 02-01, par. 8.4).

ETRTO presented a theoretical method to find, for each speed symbol the test which is the most severe and to validate that the equivalence point between the 2 tests is reached at a specific speed symbol (maybe S or T according to very preliminary studies). See more details in working document TYREgtr 03-04.

Comments:

After additional clarification on the concept proposed by the Tyre Industry (TI) some CPs indicated that they could support this approach for harmonised high speed test in principle. They were of the opinion that using existing tests is a pragmatic way to proceed, and looking for the most severe test seems a practical way forward. However, they also recognised that much more investigative work was needed to confirm preliminary industry thoughts before any decisions could be considered.

As this issue is fundamental to the development process of the new gtr it is imperative that all key CP's agree to this approach for a harmonised high speed test. A commitment is also necessary for them to be involved at all stages to ensure that a comprehensive final agreement can be reached.

The next step is to encourage the TI to perform additional testing to provide evidence that the proposal is robust. It was suggested to have a pre-meeting before the next GRRF with the sub-group and invite experts from CPs to examine in more detail the research program. This was accepted by the tyre industry and a meeting will be arranged at the beginning of July with CPs to have a discussion on the preliminary results which will be circulated prior the meeting.

As a conclusion of the discussion, it was officially agreed to endorse the idea of a pre-meeting with the sub-group to analyse the early results. CP's were also urged to engage in the assessment of the data at the earliest opportunity.

The Japanese representatives tabled a proposal for comparison of severity test between FMVSS139 and UNECE R30 for evaluation.

- **Endurance/Low Pressure Test**

The representative of RMA reviewed the background of the test and its recent developments through the FMVSS 139 (See details in working documents TYREgtr 02-06 and TYREgtr 03-02). He explained that FMVSS 139 doesn't take into consideration the flat-curve drum surface correction factor (as considered by UNECE R30) and that research and investigation are being performed by ASTM (USA) to establish a correlation between the drum test curved surface and road flat surface and to consider other influencing parameters like airflow around the tyre (see details in TYREgtr 03-01). The reason is that the failure modes during the FMVSS 139 test are not properly representing the real word failure modes. The work is in progress and results are expected by July 2007.

Comments:

The RMA representative confirmed there was no correlation between the High Speed test and endurance test.

The US representative confirmed that the Low pressure test is a new test under FMVSS139. The parameters were settled based on detailed cost and benefit analysis

- **Plunger Energy Test (Breaking Energy)**

The representative of RMA reviewed the background of the test and the reason to establish such a requirement in the 1960's when bias tyres were still predominant in all markets (See details in working document TYREgr 02-04). Also a video of a tyre under testing was shown. He questioned if this test is still appropriate for modern radial tyres in real conditions.

Comments:

The Chairman reminded there is no need for the working group to justify the validity of the tests because the tyre industry has already agreed to have all of the tests as listed in the document Tyregtr-01-03 in the gtr.

The RMA representative clarified that the question was not to cancel a test but to keep it for the appropriate category of tyres.

- **Bead Unseating Test**

The representative of RMA reviewed the background of the test and the reason to establish such a requirement in the 1960's when bias tyres were still predominant in all markets (See details in working document TYREgr 02-05). Also a video of a tyre under testing was shown. He underlined the difficulty to perform the test with modern low section height tyres. He questioned also if the test is still appropriate for modern radial tyres.

Comments:

There were no specific comments from the CP's, although India had already indicated that approximately 40% of their tyres fitted to vehicles were of the bias structure.

- **Tyre/Road Sound Emission Test, No update needed, test already harmonised (reference ISO or UNECE Regulation 117)**

The Tyre/Road Sound Emission test being already harmonized at ISO level and adopted into UNECE Reg. 117, there was no need for further action.

- **Tyre Wet Grip Adhesion Test, No update needed, test already harmonised (reference ISO or UNECE Regulation 117)**

Tyre Wet Grip Adhesion test being already harmonized at ISO level and adopted into UNECE Reg. 117, there was no need for further action.

- **Run flat test**

The Run flat test will be also incorporated in to the gtr, being a unique and already incorporated test within UNECE Reg. 30; there was no need for further action.

6. Timetable and action plan

A road map was developed inside each module.

Action items:

- Meeting to be organized by the tyre industry on high speed test at the beginning of July.
- Tyre industry to provide some figures on the worldwide market share between Radial and Bias tyres and Tubeless and Tube tyres.

7. Next steps

The next meeting of this informal working group will take place during the next GRRF in September after the session on tyres.

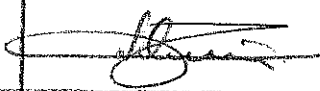
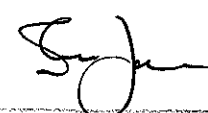


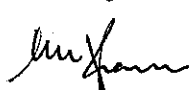
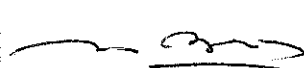

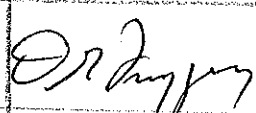
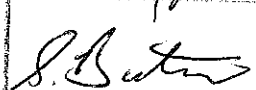
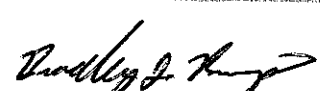
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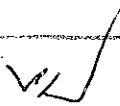

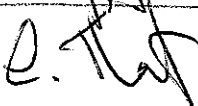

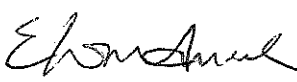

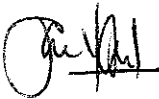
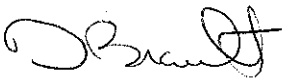


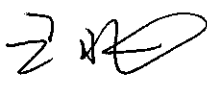

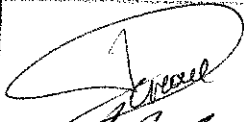
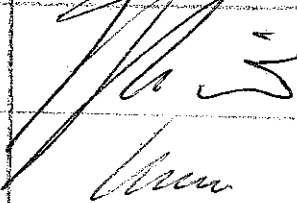


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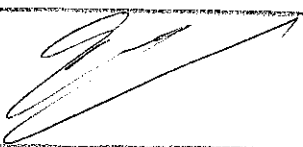


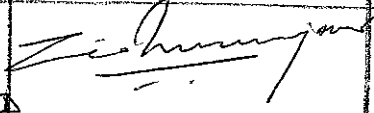
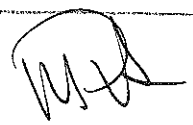

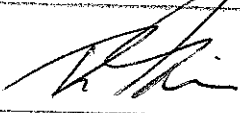

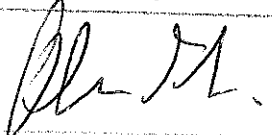

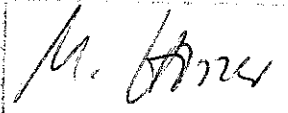
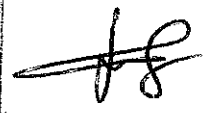
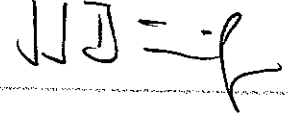
9. Close of meeting

Mr. I. Yarnold, Chairman, closed the meeting and thanked all the participants for their contribution during the discussion.

TYRE gtr - Attendance List - Feb 5, 2007

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