TYREGTR-18-26

**Report for the 18th meeting
of the Informal Working Group on Tyre GTR**

Date/Time: Tuesday 12 June 2018, 09:00 to 12:30 & 14:00 to 17:30

 Wednesday 13 June 2018, 09:00 to 12:30 & 14:00 to 17:30

 Thursday 14 June 2018, 09:00 to 12:30 & 14:00 to 16:00

Venue: 150 Kent St, Constitution Square, Ottawa, Ontario, Canada, K1P 0B2

Tower 3, on the 8th floor

Chair: Mr. Andrei Bocharov, NAMI, Russian Federation (ab@satrfond.ru)

Secretariat: Mr. Nicolas de Mahieu, ETRTO (info@etrto.org)

1. Welcome and Introduction.
	1. Welcome by Transport Canada
	2. Presentation of Transport Canada

* 1. General meeting information by the host.
	2. Roll call of the delegates.
1. Approval of the agenda.
Document: TYREGTR-18-2.

Agenda is adopted.

1. Approval of the minutes of the 17th IWG TYREGTR meeting
Documents: TYREGTR-17-14.

Meeting minutes from 17th session are adopted.

Canada requested to review the technical justification that there is no need to refer to the specific year of the ASTM

1. Case-by-case consideration of the proposed draft amendments to UN GTR No.16 incorporated to the text of the Regulation.
Document: TYREGTR-18-11

Speaker: Mr. A.Roesgen

Expected outcome: Approval by the IWG as many amendments as possible.

* 1. Phase 2a pending issues from the 17th IWG TYREGTR meeting (TYREGTR-17-14);

Action items 17th session **1 to 10**

**Action item IWG17/1**

Industry will further work out a proposal regarding Reference Test Inflation Pressure in relation to the sidewall marking in section 3.3.5 and 3.3.11. (End February 2018)

Document: TYREGTR-18-10

IWG endorsed the option 2 for tyre inflation pressure markings.

Action item can be closed

**Action item IWG18/1**

Industry will add to the technical rationale the justification for the option about the inflation pressure marking as in 3.3.5.

Industry will also add a notice on how to deal with the transitional period. (deadline: September 2018)

**Action item IWG17/2**

Industry will confirm all LT/C size specific markings (LT, CP,…) in the GTR marking section are properly addressed by the technical prescriptions of the GTR. (End February 2018)

Document: TYREGTR-18-17 is the industry assessment presenting that all national marking requirements are addressed in the GTR text.

Action item can be closed

**Action item IWG17/3**

Tyre industry is asked to prepare by next meeting the assessment of what markings (other prescriptions also to be considered) should be optional (at the discretion of the manufacturer) based on existing national regulations.

AI still open for the Industry, to be addressed after validation of IWG17/2

Document: TYREGTR-18-18 is presenting the draft concept of the required and optional markings in GTR.

Action item can be closed and is replaced by:

**Action item IWG18/2**

China will review document TYREGTR-18-06 and come with their final view by (deadline: August 2018)

**Action item IWG18/3**

Industry will work on the table as per document TYREGTR-18-18, considering the outcome of the China assessment made per document TYREGTR-18-06. This table is intended to be introduced as a reference in the technical rationale. A suggestion will be added in the technical rationale that Contracting Parties may keep optional markings in their national regulations. (deadline: September 2018)

**Action item IWG17/4**

Industry will assess the proposal made by China in paragraph 3.3.16, if these specific markings should be put in a summary table of content (checklist).

Document: TYREGTR-18-06 and TYREGTR-18-17

Document TYREGTR-18-06 is the China assessment of the proposed markings (also covered by Action item IWG17/11)

Action item can be closed and is replaced by:

**Action item IWG18/4**

Industry will consider the assessment made by China assessment (TYREGTR-18-06) in document TYREGTR-18-18. (deadline: September 2018)

**Action item IWG17/5**

Tyre industry will amend the GTR text by next IWG meeting by introducing the proposal as per TYREGTR-17-09 in the text. (February 2018)

 Item handled together with Action item IWG17/8

Action item can be closed

IWG agreed with the proposal of Test rim definition in item 2.82, and the occurrences to test rim in the GTR text.

IWG also agreed to add in annex 9 the K coefficients from ETRTO Standard Manual for aspect ratio 45 and 40 for LT/C tyres.

**Action item IWG18/5**

Industry will propose proper wording for approved and measuring rim in Annex 9. (deadline: September 2018)

**Action item IWG17/6**

Tyre industry will prepare justification/rationale to be added in the technical justification part related to TYREGTR-17-09 (February 2018)
USTMA to handle prior to Ottawa meeting.
(to be considered under agenda item 5)

Document: TYREGTR-18-16

Action item can be closed

**Action item IWG17/7**

ETRTO will make a proposal by next IWG by introducing the new text of paragraph 3.20. (editorial amendments) (February 2018)

Industry proposed to introduce technical prescriptions including provisions of GRRF-2018-5 The text relative to High flotation sizes in [], and when approved by WP.29, expected June 2018

3.20.1: physical dimensions for metric sizes

3.20.2: physical dimensions for High flotation sizes

3.20.3: legacy annex 6.
IWG endorsed the proposal with the need

- to add the high flotation tyre definition

- to put in square brackets provisions from UN regulation R54 with regards to High Flotation tyre dimensional guidelines proposed to, but still not adopted by WP.29.

Action item can be closed

**Action item IWG18/28**

Industry will work out the tolerances to be considered for the High Flotation sizes in Annex 6. (deadline: September 2018)

**Action item IWG17/8**

Industry will check the feasibility and the most appropriate approach for defining the rim width in all GTR tests: refer to industry standards or to copy ISO in Annex 9. (February 2018)

Item has been handled with item IWG17/5

Action item can be closed

**Action item IWG17/9**

Tyre industry will amend by next IWG meeting the GTR text by removing from the scope item 1.3:

1.3. Contracting Parties may also optionally decide to exclude:

LT/C Tyres with Speed Symbol less than Q

and to add this provision in part A of the GTR and square brackets in the scope of High speed test. (February 2018)

Document: TYREGTR-18-16

IWG agreed to remove paragraph 1.3 from the scope.

Action item can be closed

**Action item IWG18/6**

India will make an amendment proposal to the technical rationale (document TYREGTR-18-16) considering LT/C tyres with speed symbol less than Q.

India will also prepare a proposal to add a provision to consider tyres with speed symbol less than Q in paragraph 3.19 of the GTR text. (Deadline: August 2018)

**Action item IWG17/10**

Industry will rework the definition ‘Nominal section width’ as in paragraph 2 .43. (February 2018)

Document: TYREGTR-18-14

IWG endorsed the amendment proposal for 2.43 as presented in the GTR text (document:TYREGTR-18-25)

Action item can be closed

**Action item IWG18/7**

Industry will clarify and rephrase the definition of Theoretical Rim (width) in paragraph 2.85, included theoretical rim width in the title of Annex 9 and in the table in Annex 9. (deadline: September 2018)

**Action item IWG18/8**

Industry is requested to work out how to properly use the definitions of the measuring rim width and approved rim width as defined in 2.41 and 2.4x.

(deadline: September 2018)

* 1. Revisit of amendments to 3.6.2.5 and 3.14.3.2 as per document TYREGTR-16-09 due to request of US and Canada.

During session 16, IWG agreed with India proposal as per document TYREGTR-16-09 to amend 3.6.2.5 and 3.14.3.2 by adding the following text as per ISO :10454 clause 5.1.2.4 ‘If the tyre fails to break before the plunger is stopped on reaching the rim, and the required minimum breaking energy is not achieved, then the tyre is deemed to have passed the test at that point’.

National rulemaking is ongoing in US, and there is more time needed to have a clear statement from US.

IWG suggested to put the amendment of paragraphs 3.6.2.5 and 3.14.3.2 in square brackets in the GTR text.

**Action item IWG18/9**

US will keep IWG updated about the rulemaking process related to GTR paragraphs 3.6.2.5 and 3.14.3.2

* 1. Proposal by China

Action item 17th session **11 - 16**

TYREGTR-17-03 and TYREGTR 17-04

**Action item IWG17/11**

China will assess if the markings proposed in paragraph 3.3.16 are not already specified in section 3.3 through 3.3.15 (February 2018)

Document TYREGTR-18-06.

Item has been handled by action item IWG17/4

Action item can be closed

**Action item IWG17/12**

Industry will assess in the GTR text the definitions and markings, with priority to Load Range and Ply Rating to be replaced by Load Index for LT/C tyres, that could be considered as obsolete, and prepare clear rationale to be presented in a 1st stage to IWG, and then to GRRF. (May 2018)

Document: TYREGTR-18-15 presented a white paper prepared by USTMA

‘Perspective on Potential Elimination of Load Range (and Ply Rating) from the GTR-Tyres’

Action item can be closed

**Action item IWG18/10**

Industry is asked to rework the GTR text considering the Load index as the main reference. (deadline: September 2018)

**Action item IWG18/11**

Industry will prepare a table showing the relation between Load Range, Ply Rating and the relevant parameters used in the GTR (Load index, reference test inflation pressure, etc). This table to be added to the technical rationale.

(deadline: September 2018)

**Action item IWG17/13**

Industry will assess paragraph 3.4, tread wear indicators, considering the R54 (that do not have provisions) for tyres with regard to tread wear indicators, FMVSS 139 (that includes Tread wear indicators) and Chinese proposal.

Industry will prepare a combined proposal. (May 2018)

As already stated in document TYREGTR-17-10, Tyre Industry: documented in 3.4; 1.6 mm is specified depth; number of TWIs is ‘not less than 3 rows’ for passenger car tyres of rim code 12 or less; six rows for all other tyres (passenger and LT/C). Industry is neutral on this point, as long as current practice is accepted for current products (at least 3 rows for rim codes 12 or less and six rows for all other tyres).

IWG concluded as following:

Contracting Parties may not transpose in their national law the entire GTR text.

3.4.4 from Chinese proposal will not be considered in the GTR text

3.4.5 from Chinese proposal will be added to the table in the technical rationale as an optional marking.

Action item can be closed

**Action item IWG17/14**

Industry will assess if in paragraph 3.14, if GTR requirements are more stringent than the Indian and Chinese proposaL In this case, Industry will make a proposal in the GTR text presenting the GTR requirements as general requirements, and China and India proposal as optional.

Wording of chinese proposal will be assessed for consistency. (May 2018)

Document: TYREGTR-18-08

IWG agreed to amend the GTR text with the table as proposed in TYREGTR-18-08 in square brackets.

Action item can be closed

**Action item IWG18/12**

US will keep the IWG updated on the US rulemaking process related to Plunger Energy requirements, in order to remove in time the square brackets.

**Action item IWG18/13**

India and US will prepare a text to be added to the technical rationale reflecting India investigations on the plunger energy test requirements (Tube type and Tubeless tyres requirements) (deadline: August 2018)

**Action item IWG17/15**

China will prepare by next IWG meeting a comparison table with the test conditions proposed in Annex 11 and those already existing in GTR text. (February 2018)

Document: TYREGTR -18-07 is the China assessment of the test conditions and reflecting RF and ETRTO preliminary comments.

IWG reviewed the proposals and concludes that a new Annex 11 to the Tyre GTR shall be added.

Action item is closed and replaced by:

**Action item IWG18/14**

Industry will prepare a new annex 11 in a table format including the requirements for test equipment based on document TYREGTR-18-07.

The references to Annex 11 will be included in the main text of the GTR

This document will be presented to IWG. (deadline: September 2018)

**Action item IWG17/16**

 Industry will assess to remove all references to imperial units in the GTR.

In paragraph 3.3.4 it is mentioned that (for Passenger car) ‘*each tyre shall be labelled with its maximum permissible inflation pressure in kPa (psi) and shall be labelled with its maximum load rating in kilograms (lbs).’*

Industry informed that they are not in favor to remove the imperial units in the tyre sidewall markings.

Additional Industry comment: If both units are kept, we need to ensure that the conversion between the different units is unique and understood. Should the GTR specify an international accepted reference? Eg ADVP and Troy Lbs.

IWG agreed that both units shall be kept in the GTR text. It has been suggested to have conversion tables for all units used in the GTR.

 **Action item IWG18/15**

Industry will investigate on how to prepare conversion tables for all units used in the GTR, and where to add these conversion tables in the GTR text. (deadline: September 2018)

* 1. Other proposed amendments.

Update of the GTR based on new supplements/amendments of the regulations in the compendium:

Include the transposition of ECE/TRANS/WP.29/GRRF/2018/5 when approved in 3.20.2

Document: TYREGTR-18-13 is reflecting some editorial amendment proposals.

IWG concluded as following on these proposals:

1. Clarification on load carrying capacity: Adopted

2. Amendment of definition 2.31: "*Light truck or ~~C-type~~ Commercial tyre*" also refered to as LT/C tyres in this document, means a tyre of a group prescribed in the "LT" Light Truck or "C-type" Commercial tyre section of the standards manuals of the organizations shown in Annex 7: Adopted

3. Occurrences of ‘Passenger tyre’ to ‘Passenger Car tyre’: Adopted

4. Remove ‘pneumatic’ in the text where not needed: Adopted

5. Single point marking.

**Action item IWG18/16**

Industry to address the Single Point concept and make a proposal. (deadline: September 2018)

6. Rewording of header of Annex 5: Adopted

IWG also endorsed that the provisions in document GRRF-2018-5 related to Tyre GTR were all addressed to the GTR text.

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* 1. Readiness of the UN GTR No. 16 text as amended as per phase 2a

Document:TYREGTR-18-12

IWG reviewed all the discussed amendment proposals in the GTR text.

Document TYREGTR-18-25 is reflecting the GTR text after the IWG 18th session.

**Action item IWG18-17**

Industry (USTMA) will assess the feasibility to include in the scope of the GTR in paragraph 1.2 a new sub-paragraph “e” reflecting that a number of C3 sizes are covered by the GTR. (deadline: September 2018)

**Action item IWG18-18**

Industry will prepare the informal document with the GTR text including all IWG adopted amendments (green) + a new section for High Speed test provisions in GTR text (yellow) for IWG assessment by next IWG meeting.

1. Drafting the Statement of technical rationale and justification for Amendment 2 to UN GTR No. 16

Consideration of the draft prepared by the Industry.
IWG came to the understanding that Technical rationale should answer the question: Why the amendments are introduced?

**Action item IWG17/22**Industry will create technical rationale for the IWG already agreed amendments

Document: TYREGTR-18-16 is the proposal of technical rationale prepared by Tyre Industry.

Action item is replaced by:

**Action item IWG18/19**

Russian Federation volunteered to develop a skeleton for the technical rationale.

(Deadline: August 2018)

**Action item IWG18/20**

US and USTMA will assess which paragraphs from actual Part A are not relevant any more, and prepare a proposal. (Deadline: August 2018)

**Action item IWG18/21**

Industry will create technical rationale for the IWG already agreed amendments basing on justifications already provided in the documents considered by the IWG at 16th, 17th and 18th meeting. (Deadline: August 2018)

Suggestion is to copy the relevant comments added to the GTR text to the part A of the GTR text.

**Action item IWG18/22**

Industry will combine all proposed text in one document for review at the next IWG meeting. (Deadline: September 2018)

1. Drafting the Proposal for the Technical Report on the development of Amendment 2 to UN GTR No. 16.

IWG came to the understanding that Technical report should answer the question:

How the amendments are introduced?

Document: TYREGTR-18-04

Consideration of the draft prepared by the Industry.

**Action item IWG18/23**

Tyre industry will complete the draft technical report. (Deadline: September 2018)

Technical report shall present how IWG has proceeded for the work of GTR amendment 2.

1. Phase 2b harmonized provisions for high speed test for LT/C tyres

(Deletion of provisions for high speed test for LT/C tyres based on FMVSS 139 (Section 3.19) and UN Regulation No. 54 (Section 3.16) and addition of new harmonized provisions for high speed test for LT/C tyres (new Section 3.16)

Document: TYREGTR-18-09 is presenting the Industry proposal and technical assesment for a harmonised High Speed test.

IWG agreed to present this document to GRRF, and defined the following:

**Action item IWG18/24**

Industry will reflect the harmonised High Speed test proposal in the GTR text.

* The provision for the 60 minutes test duration for Q and below will be putted in square brackets, because US requested from the industry to have the rationale for the test time reduction (90 minutes to 60 minutes) (Deadline: August 2018).
* Industry will also consider China proposal when drafting the regulation.

Proper justification of the entire new harmonised test will be developed and sent to US and India in August 2018. US and India will provide feedback in September 2018.

1. Consideration of feasibility of harmonization of endurance test for LT/C tyres (Sections 3.16 and 3.17).

Expected outcome: IWG may decide on further actions to be taken on this topic or on closure of the activities for the time being.

**Action item IWG17/17**

Industry is requested to check the correct wording of the Chinese proposal with regard to paragraph 3.18 (May 2018).

TYREGTR-17-04

3.18. Low inflation pressure performance test for LT/C tyres

Industry assessment showed that China regulations have no requirements on this test for LT/C tyres. China agreed with Tyre industry assessment.

Action item is closed.

China confirmed that the Chinese Passenger Car tyre endurance test is the same as the GTR Passenger Car tyre endurance test.

**Action item IWG18/25**

Industry will consider adding a paragraph in Part A clarifying that for the Endurance test 3.17 and low pressure performance test 3.18 have to be executed one immediately after the other. In other words, to perform the low pressure performance test 3.18 it is required to perform first the Endurance test 3.17. (deadline: September 2018)

**Action item IWG17/18**

Industry will discuss internally to assess the feasibility of harmonized Endurance test, and come with a proposal on how to approach for the development of a harmonised Endurance test. (May 2018)

Industry explained to the IWG that they are of the opinion to stick to the WP.29 mandate and GRRF 84-05 (Sept 2017) that stated that due to the high complexity in harmonising the endurance test, the proposal is to keep the tests non harmonised for the time being.

IWG agreed with the industry opinion.

Action item is closed.

1. Consideration of feasibility of development of provisions for global tyre marking.
Feedback by tyre industry

Speaker: Mr. de Mahieu

Feedback by the Contracting Parties after the presentation of this topic to the 86th GRRF session.

Speaker: Mr. A.Bocharov

Expected outcome: Decision by the IWG on further steps.

**Action item IWG17/19**

Industry will make the assessment on tyres bearing 2 markings DOT and E, with same methodology as presented in TYREGTR-17-12. (February 2018)

Document: TYREGTR-18-19 is showing the Tyre Industry assessment on the share of tyres that are bearing DOT and E marking.

Industry has assessed the situation and estimated the potential benefit of introduction of a global mark. Tyre Industry expressed their support for a global marking in a way looking for possible cost reduction (that still needs to be assessed)

IWG agreed that no additional market research is needed from Tyre Industry

Action item can be closed

**Action item IWG18/26**

Industry will assess what would be the cost reduction and other benefits for Tyre industry by the introduction of a Global Marking (deadline: November 2018)

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AOB

1. Summary presentation of the North-American all-season tire subject to the GTR wet grip and rolling resistance requirements.
Speaker:
Document: TYREGTR-18-23 is reflecting the minutes of the pre-meeting related to the North American all season subject.

IWG agreed that for the time being no provisions related to North American all season tyres will be proposed to the Tyre GTR phase 2, and that following additional evaluation of the adhesion performance on wet surfaces (section 3.12), a future additional category of use might be necessary for certain tyre types typical in the North American market. These provisions will be developed in separate amendment to Tyre GTR.

**Action item IWG18/27**

US and Canada will make a presentation to GRRF on behalf of IWG about the need to introduce a new category of tyres covering the North-American all-season tire in GTR text. (Deadline: August 2018)

1. Drafting of the report of the IWG TYREGTR to AC.3 (June 2018 session) and GRRF (September 2018 session)

Development of the report has been worked out as per document TYREGTR-18-05 and it was reworked by the IWG. Final document to be presented to AC.3 is TYREGTR-18-05 rev1
2. List of action items.

Action items are presented in this report.

1. Next meetings.

Geneva: September 24th (10:00 – 18:00) tbc

Brussels: October 29th – 31st in Brussels (ETRTO office) tbc

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