UN Regulation No. 124 (Replacement wheels for passenger cars)

Response to Document ECE/TRANS/WP.29/GRBP/2024/16

Submitted by the experts from Germany, ETRTO, France and the Netherlands
Objective of the considerations

In the 78\textsuperscript{th} Session of GRBP in August / September 2023 the experts from Germany together with ETRTO, France and the Netherlands were asked to send their comments in written form to the expert of the Russian Federation concerning document ECE/TRANS/WP.29/GRBP/2023/20 and Informal document GRBP-78-03.

After receiving the comments, the Russian Federation submitted a new proposal in document ECE/TRANS/WP.29/GRBP/2024/16 with only minor modifications, that requires further amendments and corrections.
General remarks on the justification for amendment

• R124 is used for a specific group of wheels.

• The experts of Germany, ETRTO, France and the Netherlands did not observe problems with the quality of approved wheels on the market.

• A justification for the amendment of R124 needs to be based on observed problems; this is necessary to determine the effectiveness of the solution.

• Against the background of the mandatory implementation of R124 in the EU provided by the GSR from July 2024, the usual clear practical application of R124 should continue to be ensured.

• The expert from the Russian Federation did not provide data to support the analysis of the problem.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Paragraph 2.2.3.: 

Construction material is essential parameter for general type description; detailed further properties depending on particular construction and material are defined in Paras. 6.5.1, 6.5.2., 6.5.3 and Annex 4. 

Proposal: Leave existing definition “Construction material” without change.

For further consideration the expert from the Russian Federation is asked to provide some specific example of what it is referred to as different interpretations by the compliance assessment applicants, mentioned in the Justification.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Paragraph 2.2.4.: This is in contradiction to current type and family approach; it would multiply variety in number of variants and Approval tests.

Proposal: Amend proposal to “Number of wheel attachment holes”. (this was original intention of the provision; different shapes and sizes of wheel bolts or wheel studs can be considered within the same wheel type).
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Paragraph 2.2.8.:
This amendment would lead to confusion with Para. 2.4.3., by mixing the terms Styling and Design with partial overlap.

Proposal: The existing definition remains without change.
Suggestions for modifying the proposal for amendments

Concerning proposed new paragraph 3.1.2.13:

This issue as described in the related Justification concerning the product quality control in the production process and assurance of proper assessment of the conformity of production element of Type Approval is covered by the Initial Assessment- and COP-process provided by Schedule 1 of the Administrative and Procedural Provisions to the 1958-Agreement and by periodical re-certification of the QM systems of manufacturers (ISO 9001 etc.). The additional provision is not necessary.

Proposal: Additional text for new provision not to be added.
Suggestions for modifying the proposal for amendments

Concerning proposed new paragraph 5.1.6:

These proposed additional markings are a result of the internal quality control during wheel production and are not related to the conformity tests during Type Approval. Quality related markings are not necessary to be considered during Type Approval and should be left to the quality management procedures of the manufacturer.

Proposal: Additional text for new provision not to be added.
Suggestions for modifying the proposal for amendments

Concerning proposed new inserts to Annex 3, before the last paragraph:
In addition to the situation that these provisions are not necessary to be considered during Type Approval, the available space on the wheel for additional markings is very limited or not available in most cases.

Proposal: Additional text for new provision not to be added.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments after the table to Annex 4, Paragraph (b):

Test “b” for Aluminium and Magnesium wheels’ raw materials is not necessary or reasonable, but the test of specimens from the final product is necessary; locations of material samples to be taken are already documented in the drawing (Annex 4c).

For Steel wheels only analysis of raw material is feasible.

Proposal: Add suitable case differentiation to related Paragraphs.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments after the table to Annex 4, Paragraph (e):

Acceptance of defects, specified by the manufacturer (even in non-critical zones only) is not tolerable. There is no guarantee that such defects could not also occur in critical zones.

Proposal: Delete “acceptable defects as specified by the manufacturer” from the proposed amendment.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Annex 6, Paragraph 3:
Acceptance of defects, specified by the manufacturer is not tolerable. The Technical Service must assess defects according to the definition of “Technical Crack” as specified in Para 2.9 and distinguish from production process related failures.

Proposal: Delete text “acceptable defects as specified by the manufacturer” from the proposed amendment and leave the current provision: “Technical cracks are not accepted”.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Annex 6, Paragraph 4:
The Regulation should not recommend, nor limit technologies for Technical Crack detection.

Proposal: Amend proposed text to “A suitable technical test method to detect Technical Cracks shall be applied”.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Annex 7, Paragraph 3:

Acceptance of defects, specified by the manufacturer’s technical documentation is not tolerable. The Technical Service must assess defects according to the definition of “Technical Crack” as specified in Para 2.9 and distinguish from production related failures.

Proposal: Delete text “acceptable defects as specified by the manufacturer” from the proposed amendment and leave the current provision: “Technical cracks are not accepted”.
Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Annex 8, Table to Paragraph 3:

Proposal: Modify amendment to read “total loss of inflation pressure due to tyre depressurization through a leak in the wheel within one minute of completing the test”

and replace proposed text “Air leakage caused by the tyre damage during the test shall not be taken into consideration”.

Suggestions for modifying the proposal for amendments

Concerning proposed amendments to Annex 8, Paragraph 5 (c):

Proposal: Modify amendment to read “total loss of inflation pressure within one minute due to deformation of the wheel or a leak in the wheel”

and replace proposed text “and when the air leakage was caused by the tyre damage during the test”.

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