IWG for Wet Grip on Worn Tyres (WGWT)

Status report to 78th GRBP (August - September 2023)

IWG for Wet Grip on Worn Tyres

Targets For tyres of Class C1 Evaluate the method for preparing a tyre to be tested in worn state at its type-approval; Define the test conditions: Describe the test methods: Define the type-approval thresholds of tyre wet grip performance in worn state. Introduce "moulded SRTTworn" Define the water depth measurement methods; Improve the precision of test procedure Address the suitable requirements for tyres of classes C2 and C3 Roles Co-chairs: France and European Commission Secretariat: ETRTO (European Tyre and Rim Technical Organisation) Web page IWG Wet Grip of Worn Tyres (WGWT) - Transport - Vehicle Regulations - UNECE Wiki

IWG WGWT: facts and figures



- Meetings
 - 49th WGWT: 27th January 2023 (webconference)
 - Workshops on waterdepth measurement: 27th January, 1st, 20th, 27th, February and 27th March (Webconference)
 - 50th WGWT: 18th April 2023 (webconference)
 - 51st WGWT: 5th June 2023 (webconference)
 - 52nd WGWT: 20th July 2023 (hybrid)



- Attendees ~40
 - CPs: China, European Commission, France, Germany, Japan, the Netherlands, Spain
 - NGOs: ETRTO, ITMA, JATMA, OICA, ITTAC, USTMA

IWG WGWT: work progress

Reminder For tyres of Class C1 Evaluate the method for preparing a tyre to be tested in worn state at its type-approval; Define the test conditions: R117.03 Describe the test methods: (GRBP75) ☑ (WP29-187) Define the type-approval thresholds of tyre wet grip performance in worn state. Introduce "moulded SRTTworn" **☑** (WP29-189) Define the water depth measurement methods; ☐ 2023 test campaign Improve the precision of test procedure ☐ 2024-25 test campaign Address the suitable requirements for tyres of classes C2 and C3 R117.04 (GRBP76) (WP29-189)

Background

Test precision today for WGWT needs to be improved to be comparable with wet grip of tyres in new state in UNR117,

IWG WGWT: work progress

Test precision improvement

- 2023 test campaign
 - Focus on water depth measurement to test the recommendations made in <u>WT-50-3</u>
 - Main parameter on wet grip measurement accuracy
 - parameters to consider:
 - Different test tracks (MTD)
 - Different watering system (external/self-watering)
 - Different methods (vehicle/trailer)
 - Covering all the temperature range
 - 14 test centers in total: 9 with trailer, 5 with vehicle
- Improvement of the test precision: additional test campaign in 2024-2025 foreseen (to confirm based on 2023 test campaign conclusion)

IWG WGWT timeline

| | | 2023 | | | | | | | | 2024 | | | | | | | | 2025 | | | | | | | | 2026 | | | | | | |
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| R117.0. supp 2 R117.0. supp 1 | water depth measruement harmonisation: 2023 test campaign | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |] |
| | informal and working documents for Feb. & Sept. 2024 GRBP | | | | | | | | | ID | | | | ١ | W D | | | | | | | | | | | | | | | | | _] |
| | test precision improvement: 2024-2025 test campaign | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |] |
| | informal and working documents for Sept. 2025 and Jan. 2026 GRBP | | | | | | | | | | | | | | | | | | | | | I | D | | | WD | | | | | | |
| | Application of new regulation for worn C1, C2, C3 tyres | | | | | | | | | | | | N | <mark>e</mark> w T | ypes | | | | | | | | | | | | | | <mark>All</mark> Ty | pes | | _] |

document submission timeline
document adoption timeline GRBP
document adoption timeline WP29
entry into force
additional test campaign (test precision: water depth)
additional test campaign (test precision improvement depending on water depth test campaign conclusion)

Thank you for your attention!