

IWG for Wet Grip on Worn Tyres (WGWT)

Status report to 80th GRBP (September 2024)

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

- 56th online meeting: 13th March 2024
- 57th online meeting: 17th April 2024
- 58th online meeting: 23rd May 2024
- 59th online meeting: 10th June 2024
- 60th online meeting: 12th July 2024
- 61st online meeting: 30th July 2024
- 62nd online meeting: 5th September 2024
- 63rd hybrid meeting: 18th September 2024



- Attendees ~30

- CPs:
China, European Commission, France, 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)
 - Define the type-approval thresholds of tyre wet grip performance in worn state. (WP29-187)
 - 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

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 & next steps

Test precision improvement

Working Document submitted for GRBP Sept 2024 (GRBP/2024/23 replaced by GRBP-80-11, explained by GRBP-80-30)

- Water Depth measurement procedure
- Wetted Track Friction Range reduction ($\mu_{\text{peak,corr}}$ and $\text{BFC}_{\text{ave,corr}}$ for moulded SRTT16 worn)

IWG WGWT agreement with the following regarding next test campaign:

- 1st aim: assessment of test method precision (taking into account latest improvements introduced)
- 2nd aim: provide 1st elements regarding impact of water depth. For that, tests will be performed at several water depths

More generally, IWG WGWT aware more work on water depth needed

Informal Document to be submitted for GRBP Sept 25

Working Document to be submitted for GRBP Feb 26

Continuous improvement

C1 tyres: Effect of the regulation on tyres' usage and data collection

C2 tyres: Assessment of hydroplaning effect

Thank you for your attention!