

Status report to 77th GRBP (February 2023)

Task Force on Tyre Abrasion

On behalf of GRBP and GRPE

Task Force on Tyre Abrasion

Targets	<ul style="list-style-type: none">• Develop a procedure for measuring the abrasion of tyres: test conditions and methods• Rate the abrasion performance of a wide range of tyres available in the market• Define abrasion limits for tyres in order to limit the emission of microplastics to the environment• Assess potential correlation between abrasion performance and durability of tyres.• Develop a UN Regulation (or addition to UN Regulation No 117) for the type approval of tyres in respect to their abrasion
Roles	<ul style="list-style-type: none">• Co-chairs: France and European Commission• Secretariat: ETRTO (European Tyre and Rim Technical Organisation)
Reporting	To both working parties: GRPE and GRBP Adoption: GRBP
Web page	Task Force on Tyre Abrasion (TF TA) - Transport - Vehicle Regulations - UNECE Wiki

Task Force on Tyre Abrasion: facts and figures



• Meetings

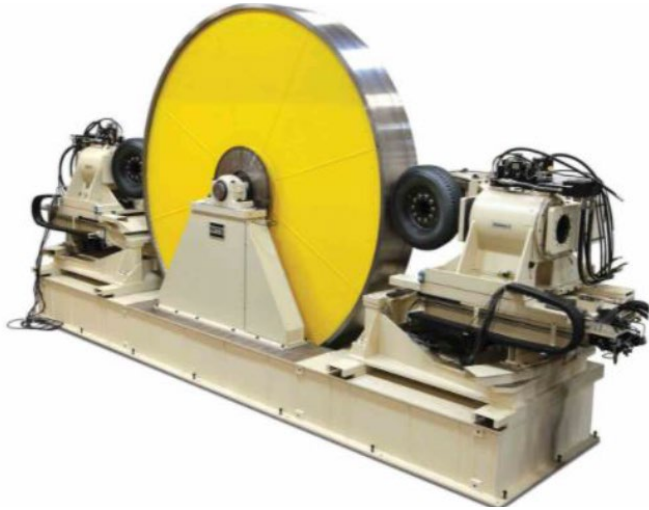
- 1st web-meeting: 28th April 2022
kick off
- 2nd web-meeting: 11th May 2022
- 3rd web-meeting: 17th June 2022
- 4th web-meeting: 2nd Sept. 2022
- 5th web-meeting: 30th Sept. 2022
- 6th hybrid meeting: 14th Nov. 2022
- 7th hybrid meeting: 9th Dec. 2022
- 8th hybrid meeting: 30th-31st Jan 2023



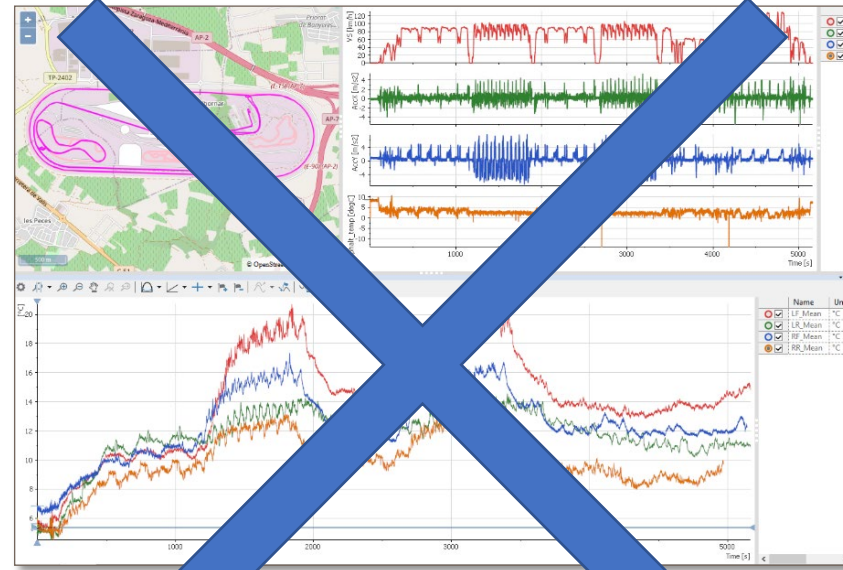
• Attendees ~80

- CPs:
European Commission, France, China, Germany, India, Japan, Norway, Netherlands, South Korea, Spain, Switzerland, UK, USA, Canada
- NGOs:
ADAC, AVL, ETRMA, ETRTO, HORIBA, IDIADA, ITMA, JAMA, JATMA, LINK, OICA*, SMMT, TRAC, TÜV Nord, UniBW., USTMA, UTAC, VTI

Possible testing methods



LABORATORY



**IN-VEHICLE ACCELERATED
ON TEST TRACK
→ Not retained
(correlation not proven)**



IN-VEHICLE REAL LIFE

Task Force on Tyre Abrasion: work progress 1/2

Work on test methods

- Description of the different test methods (study or proposals) on tyre abrasion for the correlation and validation workplan in 2023

Vehicle method:	Scope	Comments
IDIADA (EC funded project)	C1, C2, C3	final report beg. 2023
ETRTO	C1	tests ongoing (2023)
ETRTO	C2, C3	at a later stage
ADAC	C1	finished
OICA (tyre wear ≠ abrasion)	C1	finished (could restart)
UTQG (tyre mileage ≠ abrasion)	C1	Uniform Tire Quality Grading standard (USA)
Accelerated Vehicle method:		
IDIADA (EC funded project)	C1, C2, C3	ongoing (end of Sept 22)
Drum method:		
JASIC	C1	ongoing (2023)
JASIC	C2, C3	at a later stage

Activity scope precision

- Definition of durability shall be understood as [mileage until the end of life](#)

Task Force on Tyre Abrasion: work progress 2/2

Work on the 2023 test campaign

- Definition of the validation and correlation test campaign for 2023: ongoing for C1
 - Test conditions and methods
 - Tyres selections (candidate and “reference” tyres)
 - For vehicle test: assess cold and warm conditions

			2022				2023												2024												
			S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
method confirmation	method definition	vehicle method (1)																													
		Drum method (2)																													
	workplan definition	selection of market representative tyre set																													
		test parameters definition																													
		suppliers selection																													
	resources availability (tyres, test center)																														
Test method & method selection	test campaign & method selection	validation plan execution (test method uncertainty assessment)																													
		correlation plan execution																													
		intermediate method assessment																													
		method(s) selection (1 and/or 2)																													
Regulatory work	test method	Standardization of 2 reference tyres at ASTM																													
		Ref. tyres production (ramp-up + capacity adequacy assessment)																													
		Regulatory body for test method(s)																													
		drafting annexes for each test method																													
		Working document submittal for february 2024 GRBP																													
		GRPE review																													
		Working document adoption at GRBP																													
		WP29 adoption working doc																													
		Entry into force																													

Task Force on Tyre Abrasion: next

Next steps

- Finalise the methods description and launch the validation and correlation test campaign (8 test centres identified: 5 on-road, 4 drum – TBC)
- Draft the proposal of method for GRPE review (Jan 24) and GRBP adoption (Feb 24)
- Once the method(s) is validated and finalised
 - Perform the market review (end of 2023 – 2024 - TBC)
 - Define and introduce reference tyre(s) for abrasion test in ASTM standard
- Set the limits for abrasion
- Work on rating and definition (calculation?) of the mileage of tyres
- Evaluate and adapt or propose method(s) and rating to C2 and C3 tyres