



Position of the European Tyre Industry on Abrasion Limits Setting in view of Euro 7 Regulation implementation

Tyre abrasion limits: position of the European Tyre Industry

The European tyre industry has consistently supported the introduction of performance requirements on tyre abrasion. To make this possible, it has provided both expertise and substantial resources for the rapid development of a new test method – supported by all tyre manufacturers. The same manufacturers carried out a wide¹ and resource-intensive market assessment—chosen over a more economical but slower monitoring process—in order to measure the market removal rates corresponding to the proposed limit.

Further to this work, we have put forward an ambitious, yet technically feasible, proposal for tyre abrasion limits which provides predictability for all stakeholders.

This reflects the majority position² achieved after extensive and complex discussions amongst tyre manufacturers and is the maximum level of ambition that can realistically be achieved: it will already require significant investment and adaptation, and place some manufacturers under considerable strain, it provides comprehensive, workable and ambitious way forward.

This proposal needs to be viewed as a comprehensive package, meaning that it is only feasible if all elements are considered holistically.

The industry proposes:

¹ 180 tyres were tested for this purpose.

² Whilst this proposal reflects the average limits collected from all manufacturers, it is not endorsed by a tyre manufacturer.

ETRTO limits proposal (vehicle method)

	Core limit	Stage 1		Stage 2****		EU Market share***
		co-chairs	ETRTO*	co-chairs	ETRTO*	
<i>Margin by tyre category of use</i>						
Normal	1,0	[0,2]	0,25	[0,15]	0,15	
Snow	1,0	[0,2]	0,25	[0,15]	0,15	
Special use		[Not defined]	[exempted]	[Not defined]	[exempted]	0,7%
<i>Allowances for specific tyre groups</i>						
Tyre for use in severe snow conditions (3PMSF)		+0,10	+0,10	[+0,10]	+0,10	35,0%
Reinforced or extra load tyre (XL)		+0,10	+0,10	[+]	+0,10	~50%
Tyres with a nominal aspect ratio ≤ 40 and suitable for speeds ≥ 300 km/h		+0,10	+0,10	[+]	+0,10	7,2%
[Tyres with low load index (LI < 77)]		+0,10	+0,10	[+]	+0,10	< 2% (decreasing trend)
	removal rate	32%	23%	44%	36,5%	
	removal rate between stages 1 and 2			12%	13,5%	
	emission reduction (**)	~11%	~8%	~15%	~12%	

* Not endorsed by a tyre manufacturer

** Estimation based on JRC assumptions

*** based on ETRMA EUROPOOL

**** for stage 2 and it should be 5 years between the 2 stages

- **Two implementation stages**, with a **five-year interval** between them, coherently with the tyre technical development cycle as also addressed by other tyre Regulations;
- **Removal rates of 23% in Stage 1 and 36.5% in Stage 2**, in line with or above the first steps of previous tyre performance regulations (ie. Rolling resistance and wet grip). Whilst the **difference** with the removal rates proposed by the co-chairs is 9 percentage points for Stage 1 and 7.5 percentage points for Stage 2, the resulting impact on overall emission reduction is much smaller—only about three percentage points in Stage 1 and two percentage points in Stage 2. The removal rates proposed by the co-chairs would place a considerable burden on the industry, while the additional environmental benefit compared to the industry proposal would remain modest.
- **Allowances maintained across both stages**: allowances are added to the threshold limits to reflect the properties of tyres developed for specific purposes. These tyres—because of the way they are designed and the need to satisfy other performance requirements—do not behave like standard tyres for which the test method was built. Such allowances must therefore be reflected in both stages and integrated in the main text, to ensure clarity and legal certainty over time. They derive from the physical properties of tyres and are inherent to the performances regulated, as well as to the characteristics of the tyre categories concerned.
- **Inclusion of 2 methods for assessment against abrasion performance limits**: The market assessment performed in 2024 on open road vehicle and indoor drum methods has shown that the correlation between the 2 methods is currently not sufficient and would require additional work. Our preferred option would have been that from the beginning the type approval should be made only with the open road vehicle method, and introducing the type approval with the drum method when correlation is demonstrated. As a compromise we propose to include a provision in the Regulation that the drum method may be used as alternative method under the condition that the equivalence to the open road vehicle method is demonstrated to the competent Type Approval Authority.

This approach delivers significant reductions in tyre abrasion, supporting the EU's microplastic emission reduction ambition, whilst preserving the competitiveness of the European manufacturing industry and maintaining the UN timeline for adoption.

Context: State of the Industry

The tyre industry in Europe is undergoing a profound transformation while facing unprecedented challenges:

- Production costs are significantly higher than in other regions (around **double those in Asia** and **one-third more than in the US**).
- A growing share of the European tyre market is supplied by imports, with EU-based production continuing losing ground year after year.
- Several manufacturing sites in Europe have already closed, raising concerns for the long-term resilience of the sector.

In this context, any new regulatory measure must calibrate ambition, feasibility, and pace of implementation, in order to safeguard industrial sustainability and competitiveness.

Why the Proposal Should Be Supported?

• Ambitious yet feasible

The industry proposed abrasion limits are triggering removal rates higher than those applied when other tyre performances, such as rolling resistance, wet grip or noise were first regulated. They represent a meaningful first step into regulating a completely new tyre performance.

• Predictable structure

A five-year interval between stages reflects the reality of tyre and vehicle development cycles. It provides the necessary time for re-engineering, testing and industrial adaptation, in line with all other UN tyre Regulations .

• Technical consistency

The allowances reflect structural characteristics of certain tyre types. Maintaining them across both stages is essential to avoid unintended impacts on safety and mobility options for consumers.

• Safeguarding competitiveness

The industry proposal delivers significant environmental improvements with a coherent technology innovation roadmap that is both realistic and ambitious. This avoids widening the cost gap with non-EU producers and reduces the risk of further industrial decline in Europe.

Possible impacts on the European Tyre Industry

In the absence of a complete impact assessment that also takes into account the effects on the competitiveness of the European tyre industry, we can only provide an estimation of what applying more stringent abrasion limits would entail.

Based on industry experience, if the more stringent co-chairs' proposal (32% removal rate in Stage 1 and 44% in Stage 2) were adopted, the impact would be significant:

- **Higher removal rates** would mean that almost **one in two tyres** currently on the market would need to be redesigned or withdrawn by Stage 2. This can be even more evident for certain tyre application, e.g. winter, with unpredictable consequences for products availability and impact on road safety

- **Re-engineering costs** would rise sharply, especially for the Original Equipment (OE) market segment, where redesign cycles are longer and more complex. Costs for designing OE tyres can be more than **ten times those of replacement tyres**, due to the need for vehicle-specific validation. OE tyres have to meet unique, high-performance requirements, involving extensive testing and tuning for that specific vehicle model over a multi-year period.

This means that, according to the portfolio of each of ETRMA member (whether OE or replacement-heavy) and the percentage of tyres that would need reengineering, the impact could go from a few million to hundreds of millions of euros of impact – indicating that the JRC estimate of half billion euro widely underestimates the impact of this legislation.

- **Product portfolio shrinkage:** Many niche, regional, or special-use tyres may be discontinued, reducing consumer choice and potentially impacting safety in specific conditions (e.g. winter, high-load, high-speed).
- **Price pressures:** Increased development and industrialisation costs would translate into higher tyre prices for consumers and fleet operators.
- **Competitiveness loss and industrial risk:** With European production already significantly more costly than in Asia or the US, stricter limits would further widen the cost gap and accelerate the shift of market share towards imports. This would weaken Europe's industrial base and put additional pressure on plants and R&D centres, increasing the risk of closures. The consequences would be felt not only in terms of lost industrial capacity but also through job losses and reduced economic activity in regions where tyre manufacturing remains a key employer.

Conclusion

The industry proposal offers a balanced way forward: ambitious enough to deliver measurable environmental benefits, realistic enough to be implemented within the required timeframe, and consistent with Europe's wider objectives on competitiveness and resilience.

We call on policymakers to support the adoption of this proposal in the UN framework.