

European Tyre Industry Position on Commission's proposal for a regulation on type-approval requirements for the general safety of motor vehicles COM(2008) 316

The proposal consists of 3 main pillars: simplification, safety and environment; main focus of the proposal concerns simplification and tyre requirements.

The car manufacturers and tyre manufacturers are primarily concerned by the proposal. Both are highly innovative industries competing in highly competitive and innovative markets. The new regulation should therefore not endanger their position but rather consolidate it.

ETRMA welcomes the initiative of the Commission proposing to introduce <u>an integrated regulatory</u> <u>framework</u> to enhance the general safety of motor vehicles; the industry is confident that it is possible to have good safety, reduce CO2 emissions of vehicles and lower (external) tyre rolling noise **if and when** all the tyre performance criteria are considered in a balanced way, without exaggerating the requirements for lower noise. **Safety and energy efficiency must not be sacrificed for too stringent tyre rolling noise requirements**.

ETRMA would like to bring to your attention the following key issues:

- a) Requirements for tyres should be a balanced compromise
- b) Decreasing of (external) rolling noise emission limits must not lead to a decreasing of safety level –especially in critical driving conditions
- c) Implementation dates need be reformulated taking into due account lead times relative to the adoption of the implementing measures, need be consolidated for an effective enforcement of the requirements and refer to "date of production" for proper compliance.

(External) Rolling Noise

ETRMA supports the Commission intention to reduce further (external) tyre rolling noise levels, as foreseen in the 2001/43. However, the (external) noise thresholds as currently proposed, in the opinion of all ETRMA members will seriously **jeopardize vehicle and consumers' safety without any significant improvement in environmental noise**. 3 to 4 times higher reduction in external noise can be achieved by reducing speed in congested areas and/or reworking road surface.

In the C1 category, approximately 50% of all existing tyre families would have to be redesigned. A recent Swedish study1 shows that only half of the 22 tyres measured would pass the proposed limits (if they were measured on an "average" test track).

¹ SP Technical Research Institute of Sweden, Rolling Noise Emission of Tyres – A Market Survey, Hans G. Jonasson, SP Report 2007:70.



The largest reduction in the proposed limits for C1 tyres is 5 dB(A) which is the same as removing almost 3 tyres from a vehicle. Such large reductions in tyre rolling noise will inevitably lead to trade-offs in other performance characteristics such as wet grip, aquaplaning, wear and handling.

For C2 tyres, the proposed limits are also below what can reasonably be expected of the tyre industry.

For C3 tyres, the biggest problem involves traction tyres, where a reduction of 3 dB(A) in comparison with the current limits would be difficult to accomplish without degrading the adherence properties of drive axle tyres. In effect, drive axle tyres (traction tyres) must have aggressive tread patterns to allow them to move heavy goods vehicles forward in slippery conditions. If the traction properties are degraded, more trucks will have difficulties when even a small amount of snow falls, effectively blocking roads for all traffic.

A very recent study done by TÜV Automotive at the request of the tyre industry shows a significant correlation between C3 tyre rolling noise and snow adherence. The quieter tyres are worse in snow traction. In addition, of the 5 traction tyres tested, only one would pass the proposed EC limits, but with no margin for error. The 2 tyres that perform best in snow are 2 and 3 dB(A) higher than the proposed noise limit.

The industry proposes the following limit values, as shown in table:

Tyre Class	Nominal section	Current limit in	Industry	EC limit values	Market share
	width (mm)	dB(A)	proposal in	proposed in dB(A)	(2007)
			dB(A)		
C1A	≤185	72 – 74	72	70	44%
C1B	>185 ≤ 215	75	73	71	42%
C1C	>215 ≤ 245	76	74	71	12%
C1D	>245 ≤ 275	76	75	72	2%
C1E	>275	76	76	74	0.2%
C2	Normal	75	73	72	
	Traction	77	75	73	
	Special	78	76	Cancelled	
	Normal	76	74	73	
C3	Traction	78	76	75	
	Special	79	77	Cancelled	

In addition to the question of limits, it is important to consider three other points:

- ➤ the industry requests a +1dB(A) allowance for winter (M+S) –C1 category tyres in order to save snow grip.
- ➤ the current 1dB(A) allowance for C1- Extra Load tyres should be continued
- the allowances for 'Special tyres' should also be maintained: +2dB(A) for C1-tyres and +1dB(A) for C2- and C3-tyres.

Rolling Resistance

ETRMA supports the Commission objective to increase the CO₂ reduction potential, through optimized tyre rolling resistance requirements and optimum tyre pressure maintenance, while ensuring that road safety is not damaged.

On that basis, the Tyre Industry accepts the very challenging stage 2 limits proposed by the Commission for C1&C2 tyres with an implementation period extended to 4 years.

However, the stage 2-rolling resistance requirement for C3 tyres are very difficult to achieve, and therefore, ETRMA proposes not to set a second stage for C3 tyres.

Additionally, the industry needs **a 1kg/t allowance for "snow" tyres** in all the tyre segments, which represent 30% of the market.

Implementation

The proposal acknowledges the "challenge" for the tyre industry to meet the combined new technical requirements for wet grip, rolling resistance and (external) tyre rolling noise. It sets out an implementation timetable purported to reflect this challenge as well as the need to allow the replacement of existing tyre lines. However, the proposed schedule does not take account of market realities, of type approval constraints, and is unlikely to achieve effectively any of its stated objectives.

Therefore, ETRMA proposes to introduce two fairly simple mechanisms in combination, that would enable the desired transition to the new technical requirements within the same overall timeframe, i.e., by 2020. These are:

- 1. **Apply the "date of manufacture**" as the **reference point** to identify which tyres must meet the specified new technical requirements at any given time; and that any tyre produced before that given time can thus be sold off from stocks subsequent to this date².
- 2. **Consolidate** the **entry into effect at one time-point**: wet grip, rolling resistance-stage1 and noise requirements in <u>2016</u>; and the rolling resistance-stage2 requirements in <u>2020</u>.

This would translate into a new implementation schedule as follows:

[2012]³ – ie 3 years after adoption of the regulation

Type-approvals to be granted only for tyres meeting specified new tyre requirements: wet grip, rolling resistance-stage1, and noise;

- [2016] All tyres produced from this date must meet wet grip, rolling resistance stage1 and noise requirements
 - Start of type-approvals for C1&C2 meeting rolling resistance-stage2 requirements;

[2020] - All C1&C2 tyres produced from this date must meet rolling resistance-stage2 requirements.

Wet Grip

Wet grip is a safety related parameter. ETRMA therefore welcomes the Commission proposal to introduce mandatory requirements in application of UNECE R117, for passenger car tyres. Industry considers equally important to set requirements for C2-tyres, as soon as the technical specifications have been finalised.

TPMS

ETRMA welcomes the proposal to make compulsory <u>accurate</u> TPMS which would thus reinforce safety and reduce fuel consumption: driving with tyres at the right pressure is fundamental for the tyre to operate in the most optimal conditions. The Commission proposal would be improved by including a definition of the type of required TPMS.

Scope of the regulation

ETRMA considers important to precise the scope of the Regulation, which applies to all <u>newly</u> <u>manufactured</u> tyres.

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² EC Directive 2005/69, EU Official Journal L323(2005), p.51

All dates pertain to 29 October of the specified year.