

New EU Regulation on General Safety

Implementation of Tyre Aspects

Presentation to joint GRB/GRRF meeting.



European Commission
Enterprise and Industry

Overview

- Background.
- What was agreed in the GSR Co-decision Process.
- What remains to be done.

Background

- Current EU type approval standards for tyres contained in Directive 92/23/EEC (similar to UNECE Regulations 30 and 54).
- Directive 2001/43 added rolling noise limits.
- UNECE Regulation 117 copied 2001/43 noise limits and subsequently added new wet grip requirements.

Background

- As part of agreement which led to 2001/43, Commission was asked to consider more ambitious noise limits.
- Also, in order to meet CO₂ emission targets it was decided to introduce tyre rolling resistance limit values.
- Both of the above needed to be achieved without sacrificing safety (wet grip performance)

Background

- Instead of revising the existing 92/23 Directive, it was decided to put the essential tyre provisions) into the new 'General Safety Regulation' (GSR).
- The main political aspects of the GSR would be agreed by European Parliament and Council (co-decision).
- Technical aspects would, where possible, refer to UNECE Regulations.

Progress of Co-Decision Procedure

- Proposal published May 2008.
- Parliament 1st reading agreement March 2009.
- Council Adoption June 2009.

Summary of GSR Requirements on Tyres

- General tyre requirements to refer to UNECE Regs 30 and 54.
- Reduction in noise limits - by average of 4 db (A).
- New limits on rolling resistance
- New wet grip requirements.
- Tyre Pressure Monitoring Systems to be mandatory for cars.

Tyre noise proposals (C1 tyres)

Tyre class	Limit value db(A)		
	old	new	difference
C1A ($\leq 185\text{mm}$)	72-74	70	2-4
C1B (185-215mm)	75	71	4
C1C (215-245mm)	76	71	5
C1D (245-275mm)	76	72	4
C1E ($> 275\text{mm}$)	76	74	2

Additional 1 db(A) allowed for snow or extra load tyres

Old/new values not exactly comparable since tyre width categories have changed

Tyre noise proposals (C2 and C3)

Tyre class	Limit value db(A)		
	old	new	difference
C2	75	72	3
C2 snow	77	73	4
C2 traction snow traction	N/A	73 75	
C2 special	78	74 (75 for traction)	3-4
C3	76	73	3
C3 snow	78	74	4
C3 traction snow traction	N/A	75 76	
C3 special	79	75 (77 for traction)	2-4

Tyre Rolling Resistance

- New limits on rolling resistance introduced for the first time.
- Limits to apply in two stages, from 2012 and 2016 (new types).
- CO₂ reduction contribution of around 3.9 g/km for typical car.

Tyre Rolling Resistance

- Proposed values based on 'state of art' in 2004.
- 56% of summer tyres in 2004 could meet proposed Phase 1 requirements; 16% could meet proposed phase 2 requirements.
- 26% of winter tyres in 2004 could meet proposed Phase 1 requirements; 3% could meet proposed phase 2 requirements.

Tyre Rolling Resistance

- Further encouragement to improve rolling resistance could be achieved by labelling scheme.
- This is the subject of a separate Commission initiative.

Tyre Rolling Resistance

Tyre category	Max. Rolling Resistance (Kg/Tonne)	
	Stage 1	Stage 2
C1	12	10.5
C2	10.5	9
C3	8	6.5

Tyre wet grip requirements

- Introduced to ensure that safety standards are maintained.
- Identical to the current requirements in UNECE Regulation 117.
- Mandatory for new C1 tyre types from 2012 and existing types from 2014.
- Intention is to extend requirements to C2 and C3 tyres when standards are finalised.

Implementation (tyre requirements)

Item	new types	existing types*
Rolling resistance –P1)	2012**	2014 (2016 for C3 tyres)
Rolling resistance-P2)	2016**	2018 (2020 for C3 tyres)
Rolling noise	2012**	2016

*30 month sell-off period allowed

**One year later for vehicle installation requirements

Points of Concern for Parliament

- Parliament would only allow extra allowances for non-standard tyres (snow, traction, special , extra-load) if these categories were precisely defined.
- Since we will be referring to UNECE Regulations, it is necessary to agree such changes at UNECE level.

Other Outstanding Issues

- Current Timetable allows sell-off period of 30 months after last production date. Parliament requested cost-benefit study to see if this could be reduced.
- Clarification required on whether 1kg/tonne RR allowance for snow tyres applies to both phase 1 and phase 2.

What remains to be done?

Issues for Discussion at GRB/GRRF

- Tyre definitions (R30, 54, 117)
- Rolling resistance test methods (R117)
- New noise limit values (R117)

Tyre Definitions

- To cover snow tyres, traction tyres, special use tyres, extra load tyres and professional off-road tyres
- Definitions to be precise and based on physical and/or performance requirements
- Definitions agreed for R117 should also be transferred into R30 and R54

Rolling Resistance Test Methods

- Use of ISO standards
- Need to be repeatable and reproducible for use in a Type Approval environment.

New noise limit values

- New 'phase 2' values need to be compatible with values in GSR
- Accept that some Contracting Parties may wish to stay with Phase 1 for the time being – Regulation should allow for this.

Proposed Timetable

- Initial agreement at September GRB/GRRF meetings.
- Adoption at March 2010 WP29 (with possibility of final review at February GRB/GRRF sessions)



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THANK YOU
for your attention