

Informal Document No. GRRF-67-33  
(67th GRRF, 2-5 February 2010,  
agenda item 9(f))

# **New EU Regulation on General Safety**

## **Implementation of Tyre Aspects**

**Presentation to GRB and GRRF .**



**European Commission**  
Enterprise and Industry

# Overview

- Background.
- What was agreed in the GSR Co-decision Process.
- What was agreed by the GRB/GRRF group.

# 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.

# Why change was Necessary

- As part of agreement which led to 2001/43, Commission was asked to consider more ambitious noise limits.
- Also, in order to meet CO<sub>2</sub> 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)

# General Safety Regulation

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

# Progress of Co-Decision Procedure

- Proposal published May 2008.
- Parliament 1<sup>st</sup> 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 ( $\leq 185$ 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 ( $> 275$ 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).
- CO<sub>2</sub> 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 Regulation ((EC) 1222/2009).

# 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

\*Sell-off period allowed (30 months or less)

\*\*One year later for vehicle installation requirements

## Allowances for non-standard Tyres

- Council working group accepted that extra allowances were required for non-standard tyres (snow, traction, special , extra-load) for noise and rolling resistance
- Parliament would only accept such allowances if these categories were precisely defined.



# Implementing Requirements

- Detailed technical requirements (test procedures, definitions) would be agreed at Committee level
- Where possible, reference would be made to UNECE Regulations to improve harmonisation.
- Ideal solution - to incorporate requirements in updated Regulation 117.