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agenda item 6.1.)

Global Technical Regulation

55TH GRRF 3 – 6 Feb. 2005

ETRTO proposal

Global Technical Regulation

- **Background**
- **Some Ideas to Kick-off the GTR-Tyre.**

BACKGROUND

1958 Agreements - Geneva - (UN- ECE)

- **Adopt uniform technical prescriptions for wheeled vehicles , equipment, and conditions for reciprocal recognition of approval granted on the basis of these prescriptions**

- **1998 : Global agreement -Geneva- (UN- ECE)**

- **Establish Global Technical Regulation for wheeled vehicles, equipment and parts which can be fitted or used on wheeled vehicles**

1998 - Global agreement

GTR 's (Global Technical Regulation) :

- Lighting and light-signalling devices
- Tyres → *Frozen*
- Frontal impact
- Braking
- Vehicle classification, Weights and Dimensions
- Test cycles for gaseous emissions
- Etc....

Septembre 2002 GTR -Tyres was frozen

Reasons :

- USA TREAD Act

Current FMVSS has to be reviewed

Consequences for not having a GTR???

Proliferation of Test requirements

Tests (Pass. Car tyres)	ECE (1958)	UE D.92/23	DOT 109 139	ADR	SASO	CCC	NIS	Total
High Speed test	X1	X1	X2	X3	X4	X5	X6	6
Endurance			Y1	Y2	Y3	Y4	Y5	5
Breaking Energy			Z1	Z2	Z3	Z4	Z5	5
Low pressure Perf.			L1					1
Bead Unseating			U1	U2	U3	U4	U5	5
5 different « safety » tests	22 different test methods for a worldwide approval for the same tyre design							
Physical dimensions	M1	M1	M2	M3	M4	M5	M6	
	6 different methods for the same tyre design							

<i>Specific Sidewall Markings</i>	*	*	*		*	*	*	<i>COST ?</i>
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Some Ideas to reactivate GTR-Tyres.

- **1- Use only the framework of 1958 agreements**

Advantages :

- The frame exists
- It is attractive to incite other countries to participate in ECE WP 29 in Geneva
- Initiate a harmonisation process based on a set of standardised tests (menu)
- Protect national sovereignty (choice of optional requirements in the « menu »)

Disadvantages :

- Excludes self certification procedure (3rd party principle cannot be revised)
- Long term actions
- USA, Canada, are excluded (non contracting parties of the 58 agreement)

Some Ideas to reactivate GTR-Tyres.

2- Restart in the framework of 1998 agreement

The basis will be a Menu including:

- a main frame (mandatory) current Reg 30 & 54
- Optional requirements

Advantages :

- Can adopt an existing frame
 - Will be open for additional regulatory tests
 - USA, Canada, ... will not be excluded (contracting parties of the 98 agreement)
 - Optimizes the number of tests procedures used in developing global technical regulations thus reducing time & costs.
 - self certification & 3rd party principle can co-exist
- Once harmonized or developed, global technical regulations will be established in a Global Registry, which will serve as a repository of global technical regulations that could be adopted by countries from around the world.

Disadvantages : Associated difficulties

How to reduce test proliferation?

The concept :

- **Reduce the proliferation of tests methods by setting a unique tests menu in the frame of WP29.**
- **Legal authorities will select tests within the menu.**
- **All countries can add regulatory prescriptions to cope with specific geographical zones condition.**
- **World-Wide Agreement to use only the tests part of the tests menu approved in the WP29 agreement.**
- **Menu & tests evolutions will stay in the frame of WP29 .**


GTR - TYRES

A non exhaustive list for standardised tests

		* : means version adopted by WP29
Mandatory frame <i>Options</i>		MENU OPTIONS
MANDATORY FRAME	Physical Dimensions	M*
	High Speed Endurance ⇔ SS	X*
OPTIONAL FRAME	<i>Endurance</i>	<i>e</i>
	<i>Breaking energy</i>	<i>b</i>
	<i>Bead Unseating</i>	<i>u</i>
	<i>Wet Grip</i>	w*
	<i>Rolling Sound</i>	<i>s*</i>
	<i>Rolling Resistance</i>	<i>r*</i>

PROPOSAL for GTR

A list of standardised tests decided by regulatory authorities in the frame of WP29

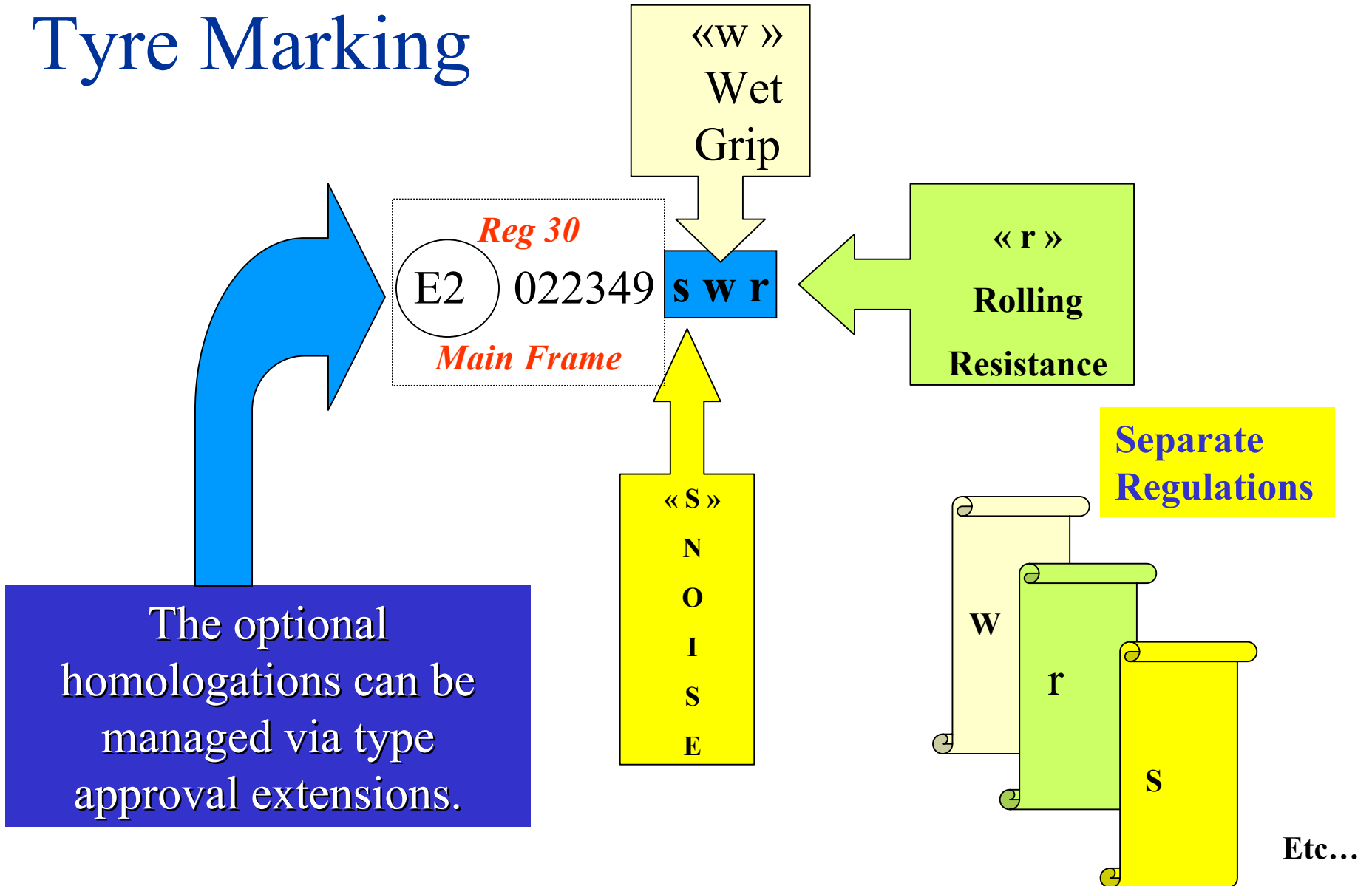
General frame		EU	CHINA	USA	X ...	
COMMON FRAME	Tyre Geometry	Yes	Yes	Yes	Yes	Mandatory requirements
	High Speed Tyre endurance ↔ SS	Yes	Yes			(interchangeability & integrity)
OPTIONAL FRAME 	Endurance		<i>e</i>	<i>e</i>		Specific requirements
	Breaking energy		<i>b</i>	<i>b</i>		
	Wet Grip	<i>w</i>				Environmental requirements
	Rolling Sound	<i>s</i>				
	Rolling Resistance	<i>r</i>				

ETRTO Proposal

A GTR program for tyres than can probably lead to a reduction of the test methods from 22 to a minimum of 6 to 8.

We are interested to develop this concept for GTR for tyres.

Optimized Tyre Marking



The optional homologations can be managed via type approval extensions.

Tyre Marking – Reg. updates

