



Global Technical Regulation for TYRES

ETRTO PROPOSAL

BACKGROUND

1958 Agreement - Geneva

- **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

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



WP 29 - 133 (06-2004): GTR for Tyres relaunched



**AC3 - Executive Committee
considered and adopted the
proposal to develop a GTR for Tyres**

(with France as sponsoring Contracting Party)


Previous GTR not successful

Our analysis of the lack of success of the previous attempt at a GTR for tyres indicates that one of the main causes was:

A unique & rigid tyre global regulation is not an appropriate answer in respect to the full purpose of the 1998 Agreement.



Why propose a GTR?



ETRTO analysis of current market
situation

Current problems for tyre industry

- In markets covered by Contracting Parties of 1958 Agreements:
 - new regulations induce review of actual legal marking and legal marking proliferation
- In the global market
 - test proliferation
 - legal marking proliferation (1958 Agreements regulations + others)
 - several factory code lists



ETRTO vision

In the global market it would be preferable to have

- A GTR with:
 - **A unique test menu**
 - **A unique legal marking structure**
 - **A world wide factory code**



ETRTO analysis

Situation in Global market:

- A more detailed worldwide analysis leads to approximately:
 - 27 different test methods
 - 6 different legal sidewall markings
 - 2 factory code lists
- Various administrative prescriptions (complicated, costly, time consuming)
- Small markets are usually the most demanding



Proliferation of Tests & Legal Marking

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	Z1	Z2	Z3	Z4	4
Low pressure Perf.			L1					1
Bead Unseating			U1	U2	U3	U4	U5	5
5 different "safety" tests	21 different test methods for a worldwide approval for the same tyre design							
Physical dimensions	M1	M1	M2	M3	M4	M5	M6	
	6 different methods to measure the same tyre design							

Large Cost Impact !!

Specific sidewall legal marking	Yes	Yes	Yes	No	Yes	Yes	Yes	COST ?
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***ETRTO proposals
in the framework of
1998
Agreements***

Proposal to build the test menu

- Invite WP 29 C.P. to submit the tests they want to include in the test menu
- C.P. will select the most appropriate tests
- Obtain approval from WP29 and AC3 for the GTR test menu for tyres
- Define the procedure for the possible evolutions in the framework of WP29

(C.P. : Contracting Parties)



Proposal to build the test menu

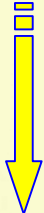
The test menu for GTR will include :

- all the type of tests already used in the main regulations
- for each type of performance, only one test will be selected
- the best regulatory practice to be defined as reference benchmark



A unique test menu:

Countries select tests from a standardised list that corresponds to their needs

General framework		EU	CHINA	USA	X ...
R30 1958 Agreement	Tyre Geometry	Yes	Yes	Yes	Yes
	High Speed	Yes	Yes		
<i>Other tests are possible in the Menu</i> 	<i>Endurance</i>		<i>Yes</i>	<i>Yes</i>	
	<i>Breaking energy</i>		<i>Yes</i>	<i>Yes</i>	
	<i>Rolling Resistance Etc...</i>	<i>Yes</i>			
	<i>Wet Grip Rolling Sound Etc....</i>	<i>Yes</i>			



A unique legal marking structure

Within GTR 1998 Agreements, the legal marking structure will contain :

- a global logo
- an area for type approval basic registration number:

(En) **XX XXXXX** related to R30 or R54 approval.

- an area for all other performances assessed:

S = Noise Emissions; **W** = Wet Grip; **R** = Rolling Resistance;

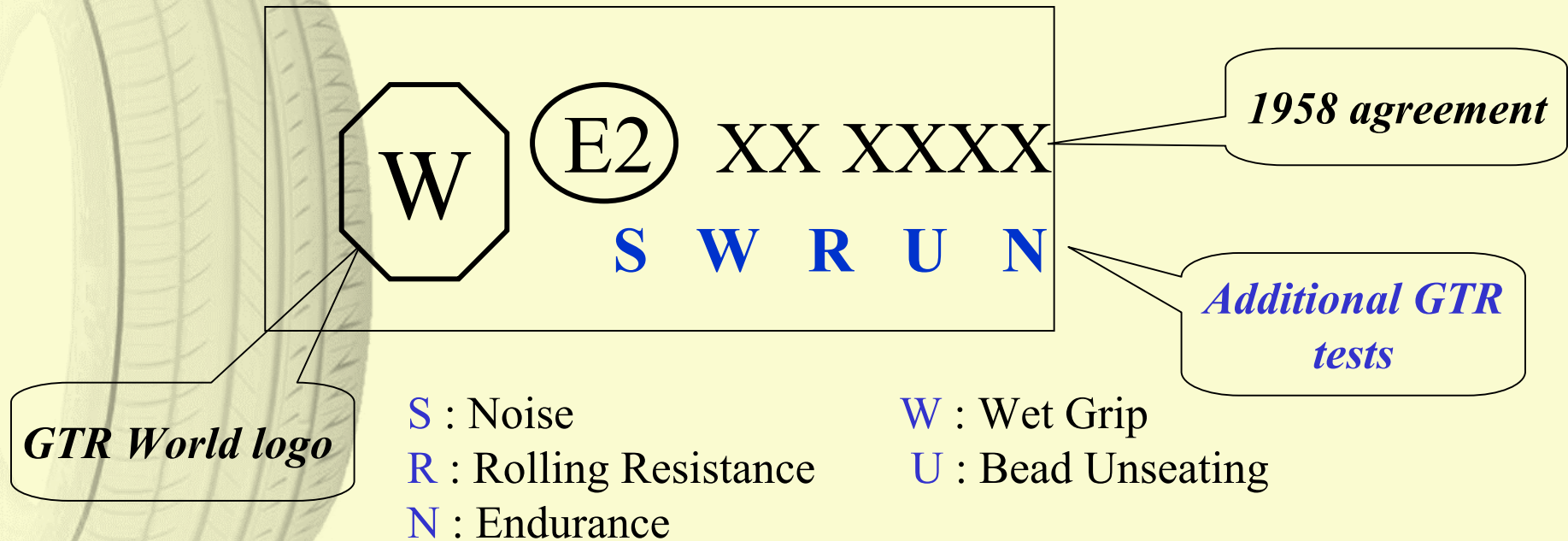
B = Braking Energy; **U** = Bead Unseating; **N** = Low speed endurance, etc.

- a unique Tyre Identification Number (including factory code)



Example of legal tyre marking in GTR

1 - A Basic Reference



2 – A Unique Tyre Identification Number (TIN, including factory code)



Factory codes

Creation of a UN factory code list

- In WP 29 define the coding logic and structure
- Alternate solution to existing factory codes

Remarks:

*A universal and unique factory code list will be needed.
If not, the proliferation cannot be stopped.*



CONCLUSION

- GTR for Tyres is still very attractive and feasible
- A huge reduction of costs and lead-time is possible especially by using a unique legal marking
- GTR will reduce lead-time for certification of the vehicle industry
- The tyre industry is ready to commit itself to:
 - Participate in a GTR ad hoc WG
 - Participate in setting up a database for complementary administrative work that would be necessary, for instance for factory codes, or other information to be shared





Thank you
for your attention

