UN/ECE REGULATIONS
proposal for optimization of regulatory framework and tyre type approval

55TH GRRF 3 – 6 Feb. 2005
ETRTO proposal
Tyre moulds

- Tyre Industry investment and asset
- Link to product performances
- Link to product appearance & end-user information
- Link to production capacity and delivery
- From 1 to 20 moulds for every tyre type/designation
- Every sidewall change imply:
  - Lead time and cost (review layout, logistics, rework, industrialization, quality control)
  - Production capacity lost
# TYRE SIDEWALL MARKINGS

*Load/Speed Performance + Noise (s = sound)*

### PASSENGER

- Logo "E x" is 12mm, height 6mm for the "E" and 4mm for the "x";
- Logo "e y" is 12x8mm, height 4mm for the "e y"
- Legal homologation number: height 4mm

<table>
<thead>
<tr>
<th>Tag Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;E x&quot;</td>
<td>02MMMMMM</td>
</tr>
<tr>
<td>&quot;e y&quot;</td>
<td>e4</td>
</tr>
<tr>
<td>&quot;E x&quot;</td>
<td>00NNNNNN</td>
</tr>
<tr>
<td>&quot;e y&quot;</td>
<td>e4</td>
</tr>
<tr>
<td>&quot;E x&quot;</td>
<td>00NNNNNN</td>
</tr>
<tr>
<td>&quot;e y&quot;</td>
<td>e4</td>
</tr>
</tbody>
</table>

### COMM. VEH.

<table>
<thead>
<tr>
<th>Tag Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;E x&quot;</td>
<td>00MMMMMM</td>
</tr>
<tr>
<td>&quot;e y&quot;</td>
<td>e4</td>
</tr>
<tr>
<td>&quot;E x&quot;</td>
<td>00NNNNNN</td>
</tr>
<tr>
<td>&quot;e y&quot;</td>
<td>e4</td>
</tr>
</tbody>
</table>

**MINIMAL dimensions:**

- Logo “E x” is 12mm, height 6mm for the “E” and 4mm for the “x”;
- Logo “e y” is 12x8mm, height 4mm for the “e y”
- Legal homologation number: height 4mm
<table>
<thead>
<tr>
<th></th>
<th>ISO Standards</th>
<th>UN/ECE Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NOISE</strong></td>
<td>ISO 13325 Coast-by Test</td>
<td>Draft defined</td>
</tr>
<tr>
<td></td>
<td>ISO 10844 Track Surface</td>
<td>To be approved by ECE</td>
</tr>
<tr>
<td><strong>WET GRIP</strong></td>
<td>Pass. Tyres Draft available</td>
<td>Draft proposal</td>
</tr>
<tr>
<td></td>
<td>CV tyres started</td>
<td></td>
</tr>
<tr>
<td><strong>ROLLING RESISTANCE</strong></td>
<td>ISO 8767 (Pass.) (4 methods)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ISO 9948 (CV)</td>
<td></td>
</tr>
</tbody>
</table>

Type approval & Sidewall marking?
WET GRIP REG. – actual proposal

LOAD/SPEED TEST

REG.30
02 series

REG.30
03 series

REG.54
00 series

REG.54
01 series

REG.xxx
00 series

WET ADHESION TEST

SOUND TEST

ETRTO

TRUCK&BUS

02MMMMMMMM

00NNNNNNNN

30R-03MMMMMMMM

02MMMMMMMM

30R-03MMMMMMMM

00KKKKKKKK-s

ETRTO

GRRF55  Feb.2004 pag. 5
WET GRIP REG. – actual proposal

LOAD/SPEED TEST

WET ADHESION TEST

SOUND TEST

ETRTO

PASSENGER

REG.30
02 series

REG.30
03 series

REG.54
00 series

REG.54
01 series

REG.xxx
00 series

TRUCK&BUS

E4

02MMMMMMMMM

00NNNNNNNN

30R-03MMMMMMMMM

02MMMMMMMMM

30R-03MMMMMMMMM

00KKKKKKKKK-s
NEW PROPOSAL – sidewall marking optimization

- **LOAD/SPEED TEST**
  - PASSENGER:
    - REG.30
      - 02 series
  - TRUCK&BUS:
    - REG.54
      - 00 series

- **SOUND TEST**
  - REG.xxx
    - 00 series

- **WET ADHESION TEST**
  - REG.xxx
    - 00 series

- **RUNFLAT tyre prescriptions**
  - 02MMMMMMMM
  - 02MMMMMMMM – s
  - 02MMMMMMMM – s w

GRRF55  Feb.2004 pag. 7
NEW PROPOSAL – sidewall marking optimization

**LOAD/SPEED TEST**

**PASSENGER**

- REG.30
  - 02 series

**TRUCK & BUS**

- REG.54
  - 00 series

**SOUND TEST**

- REG.xxx
  - 01 series

- REG.xxx
  - 00 series

- REG.xxx
  - 00 series

**WET ADHESION TEST**

- Roll. Resistance Test

**02 MMM MMM MMM**

- 02 MMM MMM MMM – s01

- 02 MMM MMM MMM – s01 w

- 02 MMM MMM MMM – s01 w r

**00 NNN NNN NN**

**GRRF55**

Feb. 2004 pag. 8