ETRTO Update on Rolling Resistance

• ISO 18164 Amdt.
• ISO 28580 progress.
• European Tyre Industry proposal to EC.
• EC consultation.
ISO 18164 Amdt.
RR measurement method for motorcycle, PC, LT and TB tyres.

• This amendment consists in the addition of Annex D (normative) - Deceleration method based on time-distance measuring, as proposed by Russian Federation.

• The CD was approved, with comments by ISO/TC31 participating countries on 2007-04-19.

SoV 2007-05-29

• The Project Leader is requested to take the comments submitted into consideration when preparing the DIS text.
ISO 28580 progress.
New RR measurement method for PC, LT & TB tyres.

- This new method was designed to be more precise and ease international cooperation and, possibly, regulation building.
- Its CD was approved with comments by ISO/TC31 participating countries on 2007-04-30.
- DIS is under preparation. It will mainly address the CD vote comments and incorporate part 10 on machines calibration. This addition will achieve the completion of the standard.
ISO 28580 progress.

• An experiment was designed to achieve the definition of part 10.
• It involves 24 measuring machines located in the EU, the US and Japan. About 530 RR measurements will be carried out on 92 tyre types (PC, LT and TB).
• DIS should be submitted to the ISO/TC31 participating countries' vote in March 2008.
ISO 28580 timeframe.

NWIP Registration 29/06/2006

CD Completion

CD Vote

DIS completion

DIS Vote

DIS completion

FDIS completion

FDIS vote

IS completion

IS publication 06/09

Round robin test Completion (if needed)

03/07 06/07 04/08 09/08 12/08 02/09 05/09

2006 2007 2008 2009
European Tyre Industry proposal to EC.

The European Tyre Industry made in July 2007, within its Tyre Performances Integrated Approach, a proposal on RR to EC DGs ENTR, TREN and ENVI.

This proposal is summarized in the 4 following slides.
## Proposal for Maximum RRc (Cr) Values

<table>
<thead>
<tr>
<th>Tyre category</th>
<th>Max Value (kg/t) Summer</th>
<th>Max Value (kg/t) «snow»</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger Cars</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class C1 UN/ECEReg 117</td>
<td>13.5</td>
<td>14.5</td>
</tr>
<tr>
<td>«LT or C» marked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class C2 UN/ECEReg 117</td>
<td>12.0</td>
<td>13.0</td>
</tr>
<tr>
<td><strong>Truck &amp; Bus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class C3 UN/ECEReg 117</td>
<td>8.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

### Commercial Vehicle Tyres

A new category to be created for Professional off-road *tyres*; for which the tyre industry asks an exemption.
## Proposal for mandatory RR grading

<table>
<thead>
<tr>
<th>Grading</th>
<th>Number</th>
<th>Range (kg/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger Cars</strong></td>
<td>4</td>
<td>1,5 kg/t per Grade</td>
</tr>
<tr>
<td><em>Class C1</em> [UN/ECEReg 117]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Light Trucks</strong></td>
<td>4</td>
<td>1,5 kg/t per Grade</td>
</tr>
<tr>
<td>«LT or C» marked</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Class C2</em> [UN/ECEReg 117]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Truck &amp; Bus</strong></td>
<td></td>
<td>Under Investigation by the «Tyre Industry»</td>
</tr>
<tr>
<td><em>Class C3</em> [UN/ECEReg 117]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This means:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>D</th>
<th>C</th>
<th>B</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC « Summer »</td>
<td>13.5&gt; Cr ≥12.0</td>
<td>12&gt; Cr ≥10.5</td>
<td>10.5&gt; Cr ≥9.0</td>
<td>Cr &lt; 9.0</td>
</tr>
<tr>
<td>PC « snow»</td>
<td>14.5&gt; Cr ≥13.0</td>
<td>13.0&gt; Cr ≥11.5</td>
<td>11.5&gt; Cr ≥10.0</td>
<td>Cr &lt; 10.0</td>
</tr>
<tr>
<td>Light Truck « Summer »</td>
<td>12.0&gt; Cr ≥10.5</td>
<td>10.5&gt; Cr ≥9.0</td>
<td>9.0&gt; Cr ≥7.5</td>
<td>Cr &lt; 7.5</td>
</tr>
<tr>
<td>Light Truck « snow»</td>
<td>13.0&gt; Cr ≥11.5</td>
<td>11.5&gt; Cr ≥10.0</td>
<td>10.0&gt; Cr ≥8.5</td>
<td>Cr &lt; 8.5</td>
</tr>
</tbody>
</table>

Grading for T&B tyre category are under investigation

Cr is the Rolling Resistance coefficient, expressed in kg/t.
EC consultation.

• End of August 2007, the EC issued a "Public consultation on outline proposals for a Regulation of the European Parliament and of the Council on Advanced Safety Features and Tyres."

• The consultation document has a part on tyre RR, based upon Tyre Industry proposal.

• The proposed approach is to replace almost all the separate vehicle safety-related Directives by a single Regulation. It would be a split-level Regulation. It would be directly applicable, thus the original Regulation, and any subsequent amendments, would not need to be transposed by Member States. It would allow the repeal of around 50 existing base Directives, Many of these Directives would be replaced by references to UNECE Regulations.

• The proposed introduction date for RR future regulation is "around 2012", after a formal proposal to Council and Parliament during 2008.

• It should include tyre noise, wet grip performance and RR with tyre type approval.

• The deadline for replies is October 18.

• The European Tyre Industry is preparing an answer.
Thank you for your attention.