Draft report to 53rd GRPE

Status Report on stage 2 of WMTC (GTR 2)
Objectives

- An amendment to the test cycle parts and vehicle classification, in order to reflect special vehicles and traffic situations in countries like India and China

- Other improvements to GTR 2 (e.g. family concept)

- Preparing data on performance requirements
Meetings

- Task Force Group
  August 2006 / October 2006

- Informal Group (FEG)
  November 2006

- Informal Group – 9th Jan 2007
Scope of Task Force work

- Task Force targets:
  - Not to include “options” in the GTR (so it is harmonised for all Contracting Parties)
  - Minor amendments to existing cycle parts and classification
  - Changes in specific parts only (e.g. reduced accelerations, reduced speed)
  - Investigation of additional criteria for possible sub-classification
Classification concepts considered:

- percentage time outside the tolerances
- acceleration factor (unspecified)
- fuel efficiency
- torque
- kilowatt per litre (kW/l)
- power to mass ratio (PMR)
The amendments are based on:
- the new database (for increased representativity)
- the ability of the MC to follow the cycle trace (as in the original cycle development)

The importance of the new data alters the balance between the cycles, i.e. the old Part 1 reduced cycle is now more typical at the world level than the Main cycle.
Cycle changes agreed by FEG

- **Part 1 cycles:**
  - retain the existing main cycle
  - modify the alternative cycle (JARI+TUEV+50 km/h)

- **Part 2 cycles:**
  - retain the existing main cycle
  - modify the alternative cycle (TUEV)
part 1
part 1, reduced speed, old
part 1, reduced speed, new
Cycle changes (rationale)

- Compromise found in FEG meeting:
  - Reflecting worldwide data
  - Vehicles should in principle be able to follow the trace
  - New changes in part 2 reduced
  - Minimum changes in existing cycle parts and classification
  - Simple classification (avoid additional criteria and sub-division)
## Cycle changes (India Data)

<table>
<thead>
<tr>
<th>classes parts</th>
<th>class 1</th>
<th>class 2-1</th>
<th>class 2-2</th>
<th>class 3-1</th>
<th>class 3-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>part 1</td>
<td>&lt; 150 ccm &amp; &lt; 100 km/h</td>
<td>&lt; 115 km/h + not class 1</td>
<td>115 – 130 Km/h</td>
<td>130 – 140 Km/h</td>
<td>&gt; 140 km/h</td>
</tr>
<tr>
<td>alternative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>part 2</td>
<td>&lt; 115 km/h + not class 1</td>
<td></td>
<td>115 – 130 Km/h</td>
<td>130 - 140 Km/h</td>
<td>&gt; 140 km/h</td>
</tr>
<tr>
<td>alternative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>part 3</td>
<td></td>
<td></td>
<td>130 – 140 Km/h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alternative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>part 3</td>
<td></td>
<td></td>
<td></td>
<td>&gt; 140 km/h</td>
<td></td>
</tr>
</tbody>
</table>
Other improvements of GTR 2

- Family Concept: to clarify the worst case procedure
- Technical Report: to update the report with the rationale for the later amendments
- Further improvements and corrections of the text of GTR 2
- Informal document to 53rd GRPE under discussion in informal meeting January 9th
Time schedule – First step

- Jan 11th: inf doc to GRPE
- Feb 07: editorial meeting and correspondence by email
- 1st March: deadline for comments
- March 16th: deadline for official doc
- June 07: official doc in 54th GRPE
- Nov 07: ? document in WP.29 / AC.3
Performance Requirements

- Second step – after introduction of cycle changes

- Data – to collect the data necessary to discuss the harmonised limit values to be applied after 2011-12.
Time schedule – Second step

- Jan 07 - Juni 07: Data collection
- July / Aug 07: WMTC/2-FEG meeting
- Jan 08: Presentation of data to GRPE
- March 08: Status report to WP.29 / AC.3