

**INDIA’S COMMENTS ON ECE/TRANS/WP.29/GRPE/2010/10, INCLUDING CANADA/US RESPONSE**

**Part A (STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION)**

Provision in 10-03-18-ECE-TRANS-WP29-2009-132e-rev.	Proposed change	Justification	Canada/US Response
<p>Paragraph 2., amend to read:                  2. <u>Procedural Background</u></p>	<p>Paragraph 2., amend to read:                  2. <u>Procedural Background</u></p>		
<p>The work ---- project by AC.3                   The gtr no.2 was approved by AC.3 in June 2005.                  Amendment 2 of gtr no.2 was approved by AC.3 in November 2007.                   The draft --- text by AC.3.</p>	<p>The work ---- project by AC.3                   The gtr no.2 was approved by AC.3 in June 2005. <del>Amendment 2</del> <b>Amendment 1</b> of gtr no.2 was approved by AC.3 in November 2007                   The draft --- text by AC.3.</p>	<p>Editorial correction.                  Amendment 1 was cleared in AC 3 in June 2005</p>	
<p>(d) <u>Performance Requirements</u>                  The principal ---- this GTR. Vehicles complying with the principal emission limits contained in paragraph 5.2. are expected to also comply with alternative requirements contained in paragraph 5.3.</p>	<p>(d) <u>Performance Requirements</u>                  The principal -- this GTR. Vehicles complying with the principal emission limits contained in paragraph 5.2. are <del>expected to also comply with</del> <b>therefore deemed to comply with</b> alternative requirements contained in paragraph 5.3.</p>	<p>The proposed change is use the same wording as was used ECE/TRANS/ WP.29 / 2009/132and conveys the desired understanding of the clause in a better way.                   (Qualitatively, there is no doubt that motorcycles complying with principal emission limit values</p>	<p>We believe it is essential to retain the language in 132e-rev as distributed by the Chairman. It is fully the intent to accept the principal limits for the purposes of compliance when there exists an alternative limit in the national legislation. However, the GTR can not “deem” that so. That has to be</p>

		<p>will satisfy the national or regional legislation requirements applicable to alternative emission limit values also. But in quantitative terms, emission limit values of each pollutant in the Principal table may or may not indicate lower values compared to the alternative emission limit values. . Therefore, it is suggested that instead of a quantitative statement; it is preferable to put a qualitative statement. Taking all this into account, the expression used in ECE/TRANS/ WP.29 / 2009/132 is more appropriate.)</p>	<p>done by the contracting party. As noted later, issues related to durability also raise questions as to whether a motorcycle meeting the principle limits could reasonably be automatically deemed to meet the alternative limits for the associated useful life.</p>
--	--	--	---

Provision in 10-03-18-ECE-TRANS-WP29-2009-132e-rev.	Proposed change	Justification	Canada/U.S. response
<p>Paragraph 5.3. ---- emission limits:</p> <ul style="list-style-type: none"> <li>• Different ---</li> <li>• --- because of the market fuel situation.</li> </ul> <p>Contracting Parties may opt to accept these alternative performance requirements (paragraph 5.3.) in addition to the principal requirements (paragraph 5.2.).</p>	<p>Paragraph 5.3. ---- emission limits:</p> <ul style="list-style-type: none"> <li>• Different ---</li> <li>• --- because of the market fuel situation.</li> </ul> <p>Contracting Parties may opt to accept <i>motorcycles complying with one or more of</i> these alternative performance requirements (paragraph 5.3.) in addition to the <i>motorcycles complying with</i> principal requirements (paragraph 5.2.).</p>	<ol style="list-style-type: none"> <li>1. As agreed upon, Item 5.1 of Part B provides option to use one or more alternatives.</li> <li>2. The present wording of the above paragraph may wrongly imply that vehicles are expected to comply with both principal and alternative requirements.</li> <li>3. The words used in Item 5.1 of Part B are very clear.</li> </ol> <p>It is hence suggested that the same words can be used in this paragraph also.</p>	<p>We think this change does make the reading of the intent more clear.</p>
<p>When a Contracting party --- -manufacturers. Compliance with the principal or alternative performance requirements, as will be determined by the national or regional certifying or type-approval agency.</p>	<p>When a Contracting party ---- manufacturers. Compliance with the principal or alternative performance requirements, as <i>opted by the contracting party,</i> will be determined by the national or regional certifying or type-approval agency.</p>	<p>The second sentence gives an impression that decision on the choice of principal or alternative emission limits is that of the certifying agency.</p>	<p>Concur with this edit.</p>

Provision in 10-03-18-ECE-TRANS-WP29-2009-132e-rev.	<i>Proposed change</i>	Justification	Canada/U.S. response
--	<p><i>It is the intent that GTR would be amended to update the principal emission limits at such time when new more stringent limits are adopted through national or regional legislation. It may also become necessary to amend the alternative emission limits due to such developments in countries opting for alternatives.</i></p> <p><i>It is also expected that different contracting parties will start applying principal emission limits at different dates considering the lead time required for implementing stricter norms. It may also become necessary to induct the earlier principal emission limit as one of the alternatives</i></p>	<p>Addition of this paragraph is suggested for following:</p> <ol style="list-style-type: none"> <li>1. The possible revisions of principal norms are covered in note 1 to item 5.1 of part B.</li> <li>2. It is necessary to introduce an explanatory paragraph in the preamble so that intentions and consequences are understood and taken care of.</li> <li>3. Similar situation may occur for alternative norms also.</li> </ol>	<p>We think this additional explanation provides context for all parties and is a reasonable addition to the preamble.</p>
<p><u>Paragraph 4. (e), amend to read:</u>  (e) <u>Reference Fuel</u>  The principal performance requirements introduced in paragraphs 5.2. of this global technical regulation are based on the use of the reference fuel as specified in Annex 2 (A2.1.) of gtr No.2. The use of this standardized reference fuel</p>	<p><u>Paragraph 4. (e), amend to read:</u>  (e) <u>Reference Fuel</u>  The principal performance requirements introduced in paragraphs 5.2. of this global technical regulation are based on the use of the reference fuel as specified in Annex 2 (A2.1.) of gtr No. 2. The use of this standardized reference fuel for determining compliance with the emission limits set out in 5.2 is considered as an ideal condition for</p>	<p>There was a suggestion to delete this, Deletion of this clause is not acceptable due to the following reasons:</p> <ol style="list-style-type: none"> <li>1. It is possible that more than one CP may accept the alternative norms. If the option is left to the CP to choose the reference fuel, the purpose of harmonization would be defeated.</li> <li>2. In general, the reference fuel specified in Annex A2.1 of GTR 2 will be suitable for the alternative</li> </ol>	<p>We concur to retain as amended Paragraph 4.e of 132e-rev.</p>

<p>for determining compliance with the emission limits set out in 5.2 is considered as an ideal condition for ensuring the reproducibility of regulatory emission testing, and Contracting Parties are encouraged to use such fuel in their compliance testing.</p>	<p>ensuring the reproducibility of regulatory emission testing, and Contracting Parties are encouraged to use such fuel in their compliance testing.</p> <p>Comment was given by (M1) that this clause should be deleted</p>	<p>norms also. However, there is also a possibility that a less stringent specification for reference fuel will be sufficient. If such is the case, it would be necessary to incorporate specification of such fuels in Annex 2 of GTR specifying that it will be applicable only for a specific alternative. The first alternative suggested by India, is based on the reference fuel specified in Annex A 2.1. (This specification is same as those for Euro 3 norms)</p>	
---	--	---	--

**Part B (TEXT OF REGULATION)**

Provision in 10-03-18-ECE-TRANS-WP29-2009-132e-rev.							Proposed change						Justification
Table 5-1: Limit values for gaseous emissions CO, HC and NOx							Table 5-1: Limit values for gaseous emissions CO, HC and NOx						See below
	CO		HC		NOx			CO	HC		NOx		
Vehicle Class	Class 1 and Class 2	Class 3	Class 1 and Class 2	Class 3	Class 1 and Class 2	Class 3	Vehicle Class	<i>All</i>	<i>Class 1 and Class 2</i>	<i>Class 3</i>	<i>Class 1 and Class 2</i>	<i>Class 3</i>	
Limit values $L_A$ mg/km	2200	[2620]	450	270	160	210	Limit values $L_A$ mg/km	<b>2620</b>	<b>750</b>	<b>330</b>	<b>170</b>	<b>220</b>	

The principal norms may be retained as EURO 3 equivalent based on the following:

1. Foot note under Para 5.2 says “The limit values set out in Table 5.1 represent the most stringent national or regional emission limits applied by a contracting party at the time of adoption of the last amendments to this GTR....”
2. We understand that Japan has not applied the new limit values yet into their legislation and are currently under discussion . Hence, these values cannot be introduced in the Principal table.
3. Moreover, there are many countries, who are not signatory to 1998 agreement who currently follow EURO II limit values and these countries are considering to introduce EURO III as their next stage of Emission regulation. If more stringent limit values like what is proposed in the new Japanese proposal is introduced in Principal table, these countries would be discouraged from moving forward with their programmes.

**Response Canada /U.S.:**

We need a clarification please regarding the status of Japan’s limits in their national legislation. If the limits are not yet adopted we believe that the EURO III limits should serve as the Principal limits. It would be premature to include the standards from Japan as the principal limit until such time as they have been adopted fully as national standards. If the Japanese standards have been officially adopted, then they could serve as the principal limits and the Euro III limits could serve as alternative limits. We are open for discussion on this issue.

Provision in 10-03-18-ECE-TRANS-WP29-2009-132e-rev.	Proposed change	Justification																							
5.3.2. Second alternative performance requirements	5.3.2. Second alternative performance requirements																								
The gaseous emissions for each class of vehicle defined in paragraph 6.3., obtained when tested in accordance with the cycles specified in paragraph 6.5.4.1., shall not exceed the values specified in Table 5-1.	The gaseous emissions for each class of vehicle defined in paragraph 6.3., obtained when tested in accordance with the cycles specified in paragraph 6.5.4.1., shall not exceed the values specified in Table <del>5-1</del> . <b>5.3</b>	Editorial correction to table no.																							
Table 5-3: Limit values for gaseous emissions CO, HC, HC + NO <sub>x</sub>	Table 5-3: Limit values for gaseous emissions CO, HC, HC + NO <sub>x</sub>	Limit values indicated in the table are same as the limit values applicable with EPA cycle.  Are these correlated values for WMTC?																							
<table border="1" data-bbox="132 618 821 829"> <thead> <tr> <th></th> <th>CO</th> <th>HC</th> <th>HC + NO<sub>x</sub></th> </tr> </thead> <tbody> <tr> <td>Vehicle Class</td> <td>All</td> <td>Class 1 and Class 2</td> <td>Class 3</td> </tr> <tr> <td>Limit values <i>L<sub>A</sub></i> mg/km</td> <td>12000</td> <td>1000</td> <td>800</td> </tr> </tbody> </table>			CO	HC	HC + NO <sub>x</sub>	Vehicle Class	All	Class 1 and Class 2	Class 3	Limit values <i>L<sub>A</sub></i> mg/km	12000	1000	800	<table border="1" data-bbox="884 618 1467 829"> <thead> <tr> <th></th> <th>CO</th> <th>HC</th> <th>HC + NO<sub>x</sub></th> </tr> </thead> <tbody> <tr> <td>Vehicle Class</td> <td>All</td> <td>Class 1 and Class 2</td> <td>Class 3</td> </tr> <tr> <td>Limit values <i>L<sub>A</sub></i> mg/km</td> <td>12000</td> <td>1000</td> <td>800</td> </tr> </tbody> </table>		CO	HC	HC + NO <sub>x</sub>	Vehicle Class	All	Class 1 and Class 2	Class 3	Limit values <i>L<sub>A</sub></i> mg/km	12000	1000
	CO	HC	HC + NO <sub>x</sub>																						
Vehicle Class	All	Class 1 and Class 2	Class 3																						
Limit values <i>L<sub>A</sub></i> mg/km	12000	1000	800																						
	CO	HC	HC + NO <sub>x</sub>																						
Vehicle Class	All	Class 1 and Class 2	Class 3																						
Limit values <i>L<sub>A</sub></i> mg/km	12000	1000	800																						

**Canada/ U.S. response:**

The U.S. has limited data on 2010 technology motorcycles (the same data that all the CPs have had access to). The data does *show increased emissions on the WMTC*, but the question is not just one of correlation, but one of what emission levels are appropriate and can be met using current technology motorcycles. An analysis by the U.S. found that the average HC+NO<sub>x</sub> increase on the WMTC was 44%, but the average HC+NO<sub>x</sub> emissions level across all the data was 0.54 g/km (including results from one advanced technology motorcycle with suspect results). This is well within the range of being able to meet a 0.8 g/km limit such as that proposed by U.S./Canada in WMTC Table 5-1.

<b><u>Provision in 10-03-18-ECE-TRANS-WP29-2009-132e-rev.</u></b>	<b><u>Proposed change</u></b>	<b><u>Justification</u></b>	<b><u>Canada/U.S. response</u></b>
<p><u>Paragraphs 6.4.</u>, amend to read:  "6.4. Specification of the reference fuel  [The reference fuels, as specified in Annex 2, ----- will be used. Contracting parties may specify different reference fuels to be used for testing vehicles for compliance with the alternative emission limits set out in 5.3.]</p>	<p><u>Paragraphs 6.4.</u>, amend to read:  "6.4. Specification of the reference fuel  [The reference fuels, as specified in Annex 2, ----- will be used. <del>Contracting parties may specify different reference fuels to be used for testing vehicles for compliance with the alternative emission limits set out in 5.3.]</del></p>	<p>It is possible that more than one CP may accept the alternative norms. If the option is left to the CP to choose the reference fuel, the purpose of harmonization would be defeated.  In general, the reference fuel specified in Annex A2.1 of GTR 2 will be suitable for the alternative norms also. However, there is also a possibility that a less stringent specification for reference fuel will be sufficient. If such is the case, it would be necessary to incorporate specification of such fuels in Annex 2 of GTR specifying that it will be applicable only for a specific alternative. The first alternative suggested by India, is based on the reference fuel specified in Annex A 2.1. (This specification is same as those for Euro 3 norms)</p>	<p>It seems that if we all concur that the principal reference fuel is appropriately paired with the principal limits....it would stand to reason that the CP would have the option to specify the reference fuel that is paired with the alternative limit. That is the intent of the amended text in 132e rev.</p>

**Chairman's message**

Comments from Chairman	India's comments	Canada/ U.S. Response
<p>Para 6.4 is still in square brackets, because discussion is still open. Maybe Japan can provide us with test results, showing the influence on emissions of the Japanese reference fuel compared to the annex 2 reference fuel in in gtr 2. The discussion should continue by email in the WMTC informal group until June.</p>	<p>From the message it appears that issue is not only those related to the use of national reference fuels for alternative norms. Is there a proposal to change Annex 2 of GTR to prescribe Japanese reference fuel as the fuel for principal norms based on JPN2 equivalent? India might have reservations on this subject. Only after a detailed study of the specification of the reference fuel, comments can be offered. Request the chairman to give us any details available.</p>	<p>Await a better understanding of the information shared by Japan on June 1.</p>
<p>Chairman's observation on Comment from Canada: "After I received a comment from Canada, I think we need to clarify about durability and useful life (new para 4. (f)). My understanding at the moment is as follows. These issues are out of scope of gtr 2 for the time being, and it's up to the Contracting Parties to decide on additional requirements in national or regional legislation. But such requirements should not lead to a situation, where new motorcycles need to apply to more stringent levels than the principal limit values"</p>	<p>Till now, the understanding has been that durability requirements will be over and above the norms (either principal or alternative) specified in GTR 2, as decided by the Contracting Party.</p> <p>To the best of our knowledge, only USA and India has durability norms.</p> <p>Indian proposal for alternative 1, durability has been built into the norms and no extra durability is applicable.</p> <p>The alternative 2 from USA/Canada, the values proposed are to be achieved at the end of useful life.</p> <p>Hence, unless a commonly agreed stand is taken and built into GTR 2, the apprehension of Chairman that such requirements will lead to a situation, where new motorcycles need to apply to more stringent levels than the principal limit values is unfortunately bound to happen.</p>	<p>We concur to retain the approach proposed in 132e-rev to include a statement to clarify the treatment of durability and propose the following wording for a new section 4(f):</p> <p>"(f) Durability requirements and/or useful life provisions are currently outside the scope of this GTR. Accordingly, contracting parties may specify durability requirements and/or useful life provisions in their national or regional legislation in relation to the emission limits set out in section 5 of the GTR. Where the CP has an alternative under 5.3 as the established national or regional emission limit any durability requirements and/or useful life requirements applicable to motorcycles</p>

	<p>For example, USA or Canada might demand that the principal norms should be complied after useful life of the vehicle. an easy way out of this situation may not be feasible.</p> <p>In case Euro 4 / Euro 5 prescribe durability requirement, there is a possibility of incorporating them in to GTR 2 as part of principal norms.</p>	<p>that meet the principal emission limits should be intended to ensure that, as a minimum, the motorcycle will comply with the alternative emission limits and durability requirements that are accepted by the Contracting Party (i.e. not a more stringent requirement)."</p> <p><b>EXPLANATION:</b>  The durability and useful life provisions are important elements of some existing national emission regulations to ensure the long-term emission performance of motorcycles. It is possible that the emission control system of a motorcycle that complies with the principal emission limits at relatively low mileage (i.e. nearly new) could deteriorate rapidly to the point where it would not comply with the minimum alternative emission limits accepted by the Contracting Party with the corresponding durability requirements. It is important that Contracting Parties have the ability to apply appropriate durability requirements to avoid the risk of this occurrence.</p>
--	---	---

-----