

List of remaining open issues on noise of motorcycles (Regulation No. 41)

Introductory remarks:

The following list of open issues was created during 49GRB.

All the results of the discussions during the 49/GRB week have been incorporated in the revised draft text of the amendment to R41 (02-R41WG-09-ann1). In this new text, the open issues listed below are clearly marked by red numbers with circles. Additional issues that have arisen in informal discussions since are marked in the draft amendment text by red squares; and the comments are included at the end of this list.

Text proposals by IMMA are printed in **bold blue** and those by Germany in **bold green**.

Note: Section 2.4.1. of annex 3 was deleted as it contained the same information as sections 2.5.2. and 2.5.3. of annex 3. section 2.4.x. were renumbered accordingly – please check the text.

Issues identified at the GRB in February 2009 in Geneva (marked by numbers in circles in the text):

1. Section 6.1.1.: possible addition of reference information on manufacturer's plate related to drive-by noise enforcement testing
D: Could IMMA please briefly describe and possibly quantify the addition burden on the manufacturer brought about by the requested additional information on the manufacturer's plate?
2. Section 6.3.: most appropriate wording for ASEP (how to best combine ASEP requirements with issuance of manufacturer declaration for type approval purposes)
IMMA: Germany to consider possibly improved wording without changing legal status/clarity
D: Germany provided an alternative wording. By clearly distinguishing in Annex 7 between requirements and testing this wording may resolve the disagreement.
3. Annex 3 section 1.2.2.: practical problem for certain regions with ambient temperatures above 40°C for several months of the year
IMMA: India, IMMA (SIAM) to provide temperature profile information for the regions concerned
D: Could IMMA please provide information on the temporal (diurnal and seasonal) and regional extend of the constraint imposed by the requirement of an ambient air temperature not exceeding 40°C during testing?
4. Annex 3 section 1.3.2.3.: need to specify commercial availability of tested tyre
IMMA: Germany to consider
D: Could IMMA please briefly describe the constraint imposed by the requirement of commercial availability of the tires?

5. Annex 3 section 1.4.2.1.: l_{ref} as actual vehicle length or fixed 2m for acceleration calculation (possible choice for manufacturer for reasons of ease of testing)
IMMA: IMMA to reconsider
6. Annex 3 section 1.4.2.1: possibility for pre-acceleration in case of CVT without locked gear ratio
IMMA: Germany to consider based on review of IMMA's justification material
D: Issue seems largely resolved. Germany wants to allow pre-acceleration always for the purpose of achieving a stable acceleration between AA' and BB'. If a stable acceleration was reached, the acceleration has to be calculated between AA' and BB'. Germany suggests an appropriate wording (see text).
7. Annex 3 section 1.4.4.2: how to deal with vehicles with a_{wot} less than a_{urban} (determination of k_p)
IMMA: Germany to review IMMA's justification material; IMMA to provide additional information to explain the low acceleration performance of these vehicles
8. Annex 7 section 2.6.: ASEP slopes and tolerance (agreed principle is that ASEP should only affect vehicles of concern and be as simple as possible with minimal testing burden; Germany will re-check the ASEP database)
IMMA: Germany to check ASEP database and decide on ASEP limitation parameters in accordance with the agreed principle
9. Annex 7 section 2.6.: most appropriate reference engine speed for ASEP evaluation (compromise between accuracy and ease of testing)
Germany to consider based on review of IMMA's justification material
10. Annex 7 section 3.1.: number of test points that can be defined within the ASEP control range at the discretion of the type approval authority / technical service

Additional issues informally discussed in Geneva (marked by numbers in squares in text):

1. Annex 3 section 1.3.3.1.3.1.: gear selection procedure, two gears give accelerations within 10% of the reference acceleration
D: As explained in the email of December 19 accompanying the draft text proposal and as discussed in Geneva, problems can occur if two gears give accelerations within 10% of the reference acceleration and the usual two-gear averaging is applied. Germany has suggested a solution to this issue (see text).
2. Annex 3 section 1.3.3.1.3.1.: exclusion of gears for which the rated engine speed is exceeded before the vehicle passes BB'
D: Germany proposes to exclude such gears from the tests.

3. Annex 7 section 2.1.: multi-mode motor cycles

D: This issue was already briefly discussed in Geneva. For motor cycles which can be operated in different modes (eco, sport,...) it is the understanding of Germany that the motor cycle has to fulfill ASEP in all of these modes. The proposed text is copied from R51.

4. Annex 7 sections 2.5. and 3.2.2.: simplification of formula

D: As discussed in Geneva Germany proposes to simplify the formula for the maximum engine speed at BB'.