

**Proposal for amendments to GRBP/2019/25r1
on Supplement 6 to the 04 series of amendments
to UN Regulation No. 41 (Noise of L₃ category of vehicles)**

The text reproduced here below was prepared by the expert from the International Motorcycle Manufacturers Association (IMMA) to amend GRBP/2019/25r1, aiming to minimize proliferation of approval numbers. In order to take into consideration comments provided by stakeholders ahead of GRBP, such informal document to improve GRBP/2019/25r1 was prepared. The modifications to GRBP/2019/25r1 are marked in red bold for new or red strikethrough for deleted characters.

I. Proposal

Paragraph 2., amend to read:

- “2. ...
- 2.1. *"Approval of a motorcycle"* means the approval of a motorcycle type with regard to noise;
- 2.2. *"Type of motorcycle as regards its sound level ~~and exhaust system~~"* means motorcycles which do not differ in such essential respects as the following:
- 2.2.1. The type of engine (two-stroke or four-stroke, reciprocating piston engine or rotary-piston engine, number and capacity of cylinders **or rotors**, number and type of carburettors or injection systems, arrangement of valves, rated maximum net power and corresponding engine speed ~~within COP tolerance~~). For rotary-piston engines the cubic capacity should be taken to be double of the volume of the chamber;
- 2.2.2. Transmission system, in particular the number and ratios of the gears **and the overall gear ratio taking into account the rear wheel circumference**.
- ~~2.2.3.~~**2.2.3** ~~Number, type, arrangement of exhaust or silencing systems.~~ **Configurations and arrangements of exhaust or silencing systems.**
- 2.3. *"Exhaust or silencing system"* means a complete set of components necessary to limit the noise caused by a motorcycle engine and its exhaust.
- 2.3.1. *"Original exhaust or silencing system"* means a system of a type fitted to the vehicle at the time of type approval or extension of type approval. It may also be the vehicle manufacturer's replacement part.
- 2.3.2. *"Non-original **replacement** exhaust or silencing system (**NORESS**)"* means a system of a type other than that fitted to the vehicle at the time of type approval or extension of type approval.
- 2.4. *"Exhaust or silencing systems of differing ~~types~~ configurations"* means systems which are fundamentally different in one of the following ways:
- 2.4.1. Systems comprising components bearing different factory or trademarks;

- 2.4.2. Systems comprising any component made of materials of different characteristics or comprising components which are of a different shape or size;
- 2.4.3. Systems in which the operating principles of at least one component are different;
- 2.4.4. Systems comprising components in different combinations.
- 2.5. ..."

Paragraph 3. "Application for approval", amend to read:

- "3.3. Respected documents mentioned in 3.2 above shall be prepared for each exhaust or silencing system configuration, if multiple configurations are applicable to the motorcycle type to be approved.**
- 3.34. At the request of the technical service responsible for conducting approval tests in agreement with the type approval authorities, the motorcycle manufacturer shall, in addition, submit a sample of the exhaust or silencing system(s).
- 3.45. ~~A~~ **All motorcycle(s) representative of the motorcycle same type with all possible exhaust or silencing system configurations** to be approved shall be submitted to the technical service responsible for conducting approval tests in agreement with the type approval authorities.
- 3.56. ..."

Paragraph 5., amend to read:

- "5. APPROVAL
- 5.1. If the motorcycle type submitted for approval pursuant to this Regulation meets the requirements of paragraphs 6. and 7. below, approval of that motorcycle type shall be granted.
- 5.2.1. An approval number shall be assigned to each type approved. Its first two digits indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party may not assign the same number ~~to the same motorcycle type equipped with another type of exhaust or silencing system, or to another motorcycle type.~~
- 5.2.2. **Multiple exhaust or silencing system configurations shall be explicitly listed under the same Approval of a Ttype of motorcycle with their respective test results. ~~or tested by worst case criteria, as established between the Type Approval Authority and the manufacturer.~~**
- 5.3. Notice of approval or of refusal of approval of a motorcycle type pursuant to this Regulation shall be communicated to the Parties to the Agreement which apply this Regulation, by means of a form conforming to the model in Annex 1 to this Regulation and of drawings of the exhaust or silencing system, supplied by the applicant for approval in a format not exceeding A4 (210 × 297mm) or folded to that format and on an appropriate scale.
- 5.4. **The respective information for multiple exhaust or silencing system configurations mentioned in 5.2.2 above shall be provided in Annex 1 to this Regulation. "**

Paragraph paras. 5.4. to 5.8. (former) renumber from 5.5. to 5.9. respectively.

Annex 3, paragraph 1.3.2.1., amend to read:

"1.3.2.1. General conditions

~~The vehicle shall be supplied as specified by the vehicle manufacturer.~~
The vehicle(s) tested shall be representative of vehicles to be put on the market under the vehicle type to be approved and selected by the manufacturer in agreement with the Type Approval Authority, to comply with the requirements of this Regulation.

Before the measurements are started, the vehicle shall be brought to its normal operating conditions.

If the motorcycle is fitted with fans with an automatic actuating mechanism, this system shall not be interfered with during the sound measurements. For motorcycles having more than one driven wheel, only the drive provided for normal road operation may be used."

II. Justification

Proposal to list multiple configurations of exhaust or silencing systems on the same type approval certificate, under the same type approval number, in order to minimize proliferation of approval numbers from models with differences in vehicle exhaust and silencing systems. The current type definition language, in its strictest sense, does not allow for multiple configurations, such as different exhausts, to be listed on the same approval certificate. A separate approval number and document must be generated for each unique configuration. As approvals according to UN Regulation No. 41 are utilized by more and more countries around the world, the increase in approval numbers and documentation burden associated with one configuration per approval can grow to a point becoming unmanageable and burdensome for the manufacturers and type approval authorities. The proposed changes clarify that multiple exhaust configurations data may be listed on a single approval certificate. This change will reduce redundancy and minimize the chances for documentation errors.

Such informal document, superseding GRBP/2019/25r1, takes into consideration all comments provided by GRBP stakeholders prior to the January GRBP session.