India's comments on proposal for the 03 series of amendments to UN Regulation No. 53 and proposal for amendments to the draft new Regulation on light-signalling devices

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The text reproduced below is prepared by the experts from India to propose changes in the above document. This proposal is specifically to remove the text on the type of beam in accordance with the considerations at the seventy-seventh session of the Working Party on Lighting and Light-Signalling (GRE) regarding a new requirement for automatic switching from the daytime running lamp (DRL) to the headlamp for L3 category vehicles. The modifications to the text of the Regulations are strikethrough for deleted characters and in *bold italic text in blue colour* for addition of new text

A) PROPOSAL

- A1) Paragraph 5.11.1.1, amend to read:
 - 5.11.1.1 If RL category of each DRL is fitted on vehicle, the headlamp [(passing beam)] shall be switched ON and OFF automatically relative to the ambient light conditions (e.g. switch ON during night-time driving conditions, tunnels, etc.) according to the requirements of Annex 7.
- A2) Paragraph 5.11.1.2, amend to read
 - 5.11.1.2. If MRL category of each DRL is fitted on vehicle, the switching ON or OFF of headlamp [(passing beam)] may be either manual or automatic. If automatic, conditions of paragraph 5.11.1.1. must be complied with.
- A3) Paragraph 5.11.2, amend to read
 - 5.11.2. If no daytime running lamp is installed, the headlamp [(passing beam)] shall automatically be ON when the engine is running.
- A4) Annex7, amend to read

Annex 7

Ambient light related automatic switching conditions for headlamps [(passing beam)]

Automatic switching conditions for headlamps ¹ {(passing beam)} ¹		
Ambient light outside the vehicle ²	Headlamps requirement	Response time for switching
less than 1,000 lux	ON	no more than 2 seconds
1,000 lux and more than 1,000 lux	At manufacturer's discretion	at manufacturer's discretion

Compliance with these conditions shall be demonstrated by the applicant, by simulation or other means of verification accepted by the Type Approval Authority.

B. JUSTIFICATION

B.1. For A1, A2, A3 and A4

i) Current AHO requirements in UN R 53 have been in place for a long time, where there has been no such technical restriction for head lamp activation either on passing beam or driving beam and so far there has been no major problems of glare that has been reported.

² The illuminance shall be measured on a horizontal surface, with a cosine corrected sensor on the same height as the mounting position of the sensor on the vehicle. This may be demonstrated by the manufacturer by sufficient documentation or by other means accepted by the Type Approval Authority.

- ii). Moreover, in-case of driving beam activation the rider gets informed through a mandatory tell-tale and so changeover to passing beam is very much feasible.
- iii). In case of DRL the rider gets no warning that vehicle is causing a glare.
- iv). The changes needed for default passing beam ON after engine running will be complex in nature, hence there will be considerable additional technology cost and development time impact for 2 wheelers.

In view of the above, India suggests that the text used in the document, i.e. "headlamp" may be retained.
